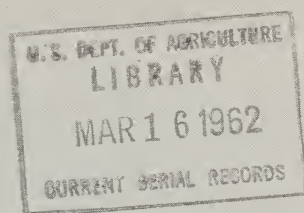


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Australia's Agricultural Production and Trade Policies Affecting U.S. Farm Exports



FOREIGN AGRICULTURAL
ECONOMIC REPORT NO. 3
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U.S. DEPARTMENT OF AGRICULTURE

FOREWORD

Australia's agriculture has many similarities to that of the United States, and many of its products are probably as competitive in the marketplace as those of any other country in the world.

This publication presents a general idea of Australia's agriculture and its marketing and trade policies as they affect the competitiveness of U.S. and Australian farm products, both in local and foreign markets. This analysis is based on the author's years of study of Australia's agricultural economy and firsthand impressions gathered from a trip "down under" in 1959.

The author sincerely acknowledges the invaluable assistance of Government officials, marketing organizations, and private traders in Australia in making this publication possible.

December 1961.



Growth Through Agricultural Progress

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Note: All tonnage figures in this publication are in short tons.

Australia's Agricultural Production and Trade Policies Affecting U.S. Farm Exports

by Mary E. Long

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I. SUMMARY

Agriculture continues to play a vital role in Australia's economic development. An annual average of four-fifths of this country's export revenue is derived from the sale of agricultural products, chiefly wool, wheat, meat, and dairy products. As long as industry continues to depend on imported heavy machinery and such raw materials as petroleum and metals, Australia will seek to increase exports of farm products in order to pay for these essential imports.

Over 142 million of the 1.9 billion acres of total land area in Australia are suited to crop cultivation. Another 800 million acres have sufficient rainfall to support grazing but are inadequate for crops. Total farm area has increased approximately 13 percent since prewar, mostly in cultivated pastures and grazing land. Eighty percent of the farms vary in size from 50 to 50,000 acres, the average farm being about 4,000 acres. Although area planted to crops has increased only slightly since the 1930's, yields have risen significantly in normal crop years.

Farm output on a volume basis has expanded over 50 percent since World War II. It now supplies a population of 10 million, as compared with 7.4 million in 1945, plus a large exportable surplus. Much of the production increase in recent years is accounted for by a larger output of wool, wheat, meats, dairy products, cane sugar, feed grains, and fruits. Since 1957, the net value of farm production has been about 30 percent of the total net value of all industry.

Australia's future competitive position in foreign markets will depend on such factors as its population growth, overall country development, and ability to keep internal and external costs at minimum levels to offset freight disadvantages to distant marketing outlets.

Indications are that government and private interests will continue to promote increased agricultural investment in Australia. Newly developed irrigated crops in sections where irrigation and hydroelectric projects are now under construction will probably account for some of the expected

increase in production. Other expansion will result from still greater scientific research and technological improvements in the use of fertilizers and insecticides, improved seeds, better pastures, and wider adoption of extension and farm management services by individual farmers. In recent years, soil fertility has been improved and high-yielding pastures established in large areas of South and Western Australia which were formerly undeveloped and nonproductive. To attract population and develop the Northern Territory, the Government is encouraging greater investment in transportation and other facilities in that area.

Some obstacles to future agricultural expansion in certain states may result from competition between industry and agriculture for labor, land, and water, with higher production costs ensuing for such commodities as wheat, dairy products, fruits, cotton, tobacco, and rice.

During the past few years, Australia has sought to broaden foreign outlets for its farm products, placing less dependence on the United Kingdom as its primary market. Bilateral agreements, trade missions, and exhibits at international fairs are a few of the methods employed. Considerable emphasis has been placed on food and raw material exports to Western Europe, the Middle East, Japan, and Southeast Asia. Greater expansion of trade is also planned with Latin America. Moreover, in the 5-year period 1955-56 to 1959-60, sizable increases were noted in wool shipments to Communist countries, chiefly Poland, Czechoslovakia, and mainland China.

The similarity between Australia's agricultural commodities and those of the United States will continue to provide keen competition for U.S. farm products both at home and abroad. Australia's recently expanded production of tobacco and cotton, for example, has reduced imports of these important products from the United States. Overseas, Australia's increased competition with U.S. products is already evidenced in such major markets as Japan, the United Kingdom, Canada, and West Germany; greater competition is also expected in other Far Eastern and European areas and in Latin America. Although Australia is a traditional supplier of much U.S. apparel wool, it has recently supplemented this market with considerable quantities of beef and veal, mutton and lamb, and live lambs. While trade in live lambs appears to have been unprofitable, shipments of Australian manufacturing beef and mutton to the United States will probably continue.

II. PRODUCTION POLICY

In the overall policy of increasing farm production, major attention is directed at increasing productivity and holding down the cost of marketing. Australian agriculture is subject to high labor, transportation, machinery, and fertilizer costs. Both agriculture and industry are keen competitors for labor. The agricultural labor force in 1954 was about 10 percent of the total work force and has been declining since. Transport facilities are



inadequate throughout many rural areas, and freight rates for fertilizers, wheat, livestock, and feed grains are high in most states.

Australia's crop and livestock production has increased significantly since prewar years as shown in the appendix (table 30). Area planted to crops increased by about 12 percent in 1959-60 (table 1).

With the exception of feed grains, yields of most crops have increased in the postwar years (table 2). The index of agricultural production in 1959-60 was 120 (1952-55=100) compared to 76 prewar. In recent years, both crop and livestock production has profited from technological advances in the use of fertilizers, plant breeding, disease control, rabbit eradication, and mechanization. Sheep numbers increased in 1960 to 40 percent above prewar, most of this increase occurring since 1956 (table 3).

The value of agricultural output in the postwar period has declined in relation to other sectors of the economy. The net value of agricultural production totaled about 32 percent of the value of all production in 1958-59 as compared with 42 percent prewar (table 4). Much of this decline in the relative importance of agriculture is accounted for by heavy capital investment in factories and industrial production since the early 1950's.

TABLE 1.—*Land use in rural holdings: Averages 1936–38 and 1952–56, annual 1958 and 1959*¹

Land use	Average		1958	1959 ²
	1936–38	1952–56		
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>
Area planted to crops	22, 017	20, 963	23, 875	25, 023
Land in fallow	10, 770	³ 6, 570	7, 379	7, 025
Cultivated pastures—grasses and clover	4, 796	26, 375	33, 556	33, 289
Grazing and other farmland	859, 417	966, 607	1, 070, 590	1, 082, 246
Total farm area	897, 000	1, 020, 515	1, 135, 400	1, 147, 583
Farm area as percent of total land surface	47	54	60	60

¹ Year beginning July 1.

² Preliminary.

³ Estimated.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part I—Rural Industries, 1958–59*. Bul. 53. Canberra. July 1960.

Commonwealth Bureau of Census and Statistics. *Rural Land Use and Crop Production—Australia, 1959–60*. Stat. Bul. 17. Canberra. November 1960.

TABLE 2.—*Selected crops: Yields per acre, averages 1936–38 and 1947–56, annual 1958 and 1959*¹

Crop	Unit	Average		1958	1959 ²
		1936–38	1947–56		
Wheat	Bushels	12	16	21	16
Barley . . . . .	..do.	18	21	26	14
Oats . . . . .	..do.	13	15	22	15
Rice, paddy . . . . .	..do.	83	105	141	136
Peanuts, unshelled	Pounds	889	953	1, 179	982
Apples ³	Bushels	123	159	199	208
Peaches ³ . . . . .	..do.	111	132	182	193
Pears ³ . . . . .	..do.	111	203	266	294
Tobacco, dried leaf	Pounds	500	773	922	967
Cotton, unginned . . . . .	..do.	246	360	382	500

¹ Crop year.

² Subject to revision.

³ Per bearing acre.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part I—Rural Industries, 1955–56*. Bul. 50. Canberra. January 1958.

Same, 1958–59. Bul. 53. July 1960.

Commonwealth of Australia, Bureau of Agricultural Economics. *Quarterly Review of Agricultural Economics*. Vol. XIII, No. 4. Canberra. October 1960.

TABLE 3.—*Livestock numbers: Averages 1936–38 and 1947–56, annual 1958–61*

Year ¹	Sheep ²	Beef cattle	Dairy cattle	Pigs
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>
Average:				
1936–38	110,830	³ 13,494		1,199
1947–56	117,314	10,087	4,803	1,166
Annual:				
1958	149,315	11,898	4,994	1,423
1959	152,685	11,411	4,846	1,289
1960	155,158	11,633	4,877	1,424
1961	152,666	12,402	4,901	1,617

¹ As of Mar. 31.

² Includes lambs.

³ Beef and dairy cattle not shown separately until 1943.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part I—Rural Industries, 1955–56*. Bul. 50. Canberra. January 1958.

Same, 1958–59. Bul. 53. July 1960.

Commonwealth Economic Committee. *Intelligence Bulletin (Dairy Products and Meat)*, Vol. XIV, No. 4. London. September 1961.

TABLE 4.—*Agricultural and industrial production: Net value, average 1936–38 and 1952–56, annual 1957 and 1958* ¹

Industry	Average		1957 ³	1958 ³
	1936–38 ²	1952–56 ³		
	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>	<i>Mil. dol.</i>
Agriculture	210.9	592.7	547.7	736.8
Pastoral	292.1	1,116.0	1,002.0	993.7
Dairying	110.9	315.5	285.9	317.9
Poultry	25.1	70.9	61.2	61.3
Bee farming .....	.4	3.5	3.5	3.6
Total rural	648.4	2,098.6	1,900.3	2,113.3
Trapping	8.9	12.4	13.5	14.2
Forestry	29.8	102.1	114.9	117.1
Fishing and whaling	6.2	19.2	23.3	25.2
Mining and quarrying	99.0	271.1	284.0	265.1
Total nonrural	143.9	404.8	435.7	421.6
Factories	744.8	3,045.6	3,872.3	4,127.4
Total all industry	1,537.1	5,549.0	6,208.3	6,662.3
Percent agriculture is of all industry ..	42	38	31	32

¹ Years beginning July 1.

² Converted at \$3.869 to Australian pound.

³ Converted at \$2.24 to Australian pound.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part II—Non-Rural Industries and Value of Production, 1957–58*. Bul. 52. Canberra. 1959.

Same, 1958–59. Bul. 53. Canberra. 1960.

Price Stabilization

Most farm commodities are produced under some form of price incentive to farmers. Certain major agricultural products are subject to a two-price system: the domestic price to producers is generally calculated on a cost-of-production basis, with export prices dependent on world marketing conditions for individual commodities. Cotton and dairy products are produced under direct government subsidies, while wheat, barley, and flaxseed are subject to price stabilization plans or fixed-price schemes. Dairy products are subject to both subsidy and price stabilization programs.

Wheat Stabilization Plan

The present Wheat Stabilization Plan, effective until 1963, contains many provisions of earlier plans. As ratified by the Australian Wheat Growers Federation and the Commonwealth and state governments, it contains the following provisions:

- The Australian Wheat Board continues as sole authority for marketing wheat.
- Growers are guaranteed the cost of production on 100 million bushels of wheat exported from each crop produced through 1962-63. This guaranteed price was set at 14s. 6d. (\$1.62) per bushel f.o.r. (free on rail) at ports for the 1958-59 crop, increased to 14s. 10d. (\$1.66) for 1959-60, and again increased to 15s. 2d. (\$1.70) for 1960-61. Each year this price is adjusted on the basis of a cost survey of the wheat industry made by the Commonwealth Government's Bureau of Agricultural Economics. This guaranteed price, plus 2d. (2 cents) per bushel for interstate shipments, becomes the fixed price for wheat consumed domestically.
- The plan provides for a stabilization fund not to exceed £A20 million (\$45 million) financed from the proceeds of an export tax of 1s. 6d. (17 cents) per bushel on all exported grain.
- If the average export price falls below the guaranteed price, deficiency payments to producers are made up by drawing upon the stabilization fund. If the fund is exhausted, the Commonwealth Government is committed to make up the deficiency in payments to growers on the 100 million bushels of wheat guaranteed under the plan. This situation occurred at the end of the 1959-60 season, obligating the Government to pay the deficit in 1961.

Dairy Stabilization Scheme ¹

The current 5-year plan, effective through 1961-62, was legislated under the Dairy Industry Assistance Acts of 1942. Its main features are that the Commonwealth Government, with the approval of state governments, determines the wholesale prices of butter and cheese; guarantees dairy farmers

¹ For details of organization and marketing of dairy products, see Silcox, W. Bruce. *Australia's Dairy Industry—Competitive Aspects*. U.S. Dept. Agr., Foreign Agr. Serv., FAS-M 25. November 1957.

a price based on the cost of efficient production; and provides direct subsidy payments on milk used only in the manufacture of butter and cheese.

The price guarantee of 53d. (49 cents) commercial butter basis set for the 1959-60 season was increased to 54.19d. (51 cents) for 1960-61. This guarantee applies to all butter and cheese sold for home consumption, plus a quantity for export equivalent to 20 percent of the amount consumed domestically.

Direct subsidy payments are made to producers via processors on a flat basis determined from year to year by the Commonwealth Government. Since 1956-57, this subsidy has been set at £A13.5 million (\$30.2 million) annually.

In addition to the subsidy, the Commonwealth Government agreed in 1958-59, and continued this pledge in 1959-60 and 1960-61, to underwrite a minimum average return to dairy farmers of 40d. (37 cents) per pound commercial butter basis on all butterfat going into the manufacture of butter and cheese. So far, no payments have been made under this obligation as the overall marketing returns on butter and cheese sales have exceeded the minimum levels for both the 1958-59 and 1959-60 seasons.

Land Use Policy

The state governments, in collaboration with the Commonwealth Government, have endeavored to maintain a flexible land policy for the country as a whole. This policy provides for initial extensive development so that each farm operation may be given a chance to succeed financially. The policy can be adjusted as population increases and developmental factors favor more intensive farming.

Landownership laws vary from state to state. All land settlement programs are the responsibility of the state, regardless of the method of financing. In Victoria, practically all land used in agriculture is owned by the farmer. Lands in Western Australia have also been subject to sale and individual ownership. In most other states, however, much of the land available for agriculture is owned by the Crown and leased on a long-term basis subject to renewal after a period of years.

Under the War Service Land Settlement Scheme, the farmer may purchase land at long-term low-interest rates. The scheme, which became effective in 1945, has been administered by each state. Some wealthier states actually financed the program, but Commonwealth funds were used to finance settlement in South Australia, Western Australia, and Tasmania.

Irrigation Development

While Australia's rainfall pattern varies widely from area to area, very little of the continent has an average annual rainfall exceeding 20 inches. As a result, Australia has only a sparse river network system. Perennial

streams occur chiefly in the Murray-Darling Basin, which encompasses catchment areas in Victoria, New South Wales, Queensland, and South Australia. The Murray catchment area and length ranks it with the world's greatest rivers. However, the average annual flow of this river, including its chief tributaries—the Murrumbidgee, Goulburn, and Darling—is only about 12 million acre-feet.

Efforts are therefore being made to conserve Australia's meager water resources through effective storage dams and irrigation systems. The motivating factor is to check the river runoff to the seas on all sides of the continent and to provide greater utilization of water resources for power and irrigation. The average annual runoff for all of Australia is estimated at 200 million acre-feet. The overall annual riverflow averages about 60 million acre-feet, far less than the 900 million acre-feet provided by the river systems in the United States. Most irrigation projects, completed or under construction, are concentrated within the Murray-Darling Basin in Victoria, New South Wales, Queensland, and South Australia. Smaller installations have been built, or are planned, for Western Australia.

Originally, irrigation installations were financed by private capital and adapted primarily for production of citrus and vine fruits. In recent years, state governments have controlled irrigation through water rights commissions governed by special legislation. Irrigation has been extended to crops other than fruits such as rice, vegetables, sugarcane, tobacco, and pastures.

The Commonwealth and state governments are now combining efforts in building large-scale water conservation projects which provide hydroelectric power for industry and increase the availability of water for irrigation. The major program of this nature is the \$1 billion Snowy Mountain project which is expected to be completed and in full operation by the mid-1970's. Storage facilities are being constructed in the Snowy Mountains, and waters from the Eucumbene, Upper Murrumbidgee, and Tooma Rivers will be diverted to farming regions by a series of smaller dams, weirs, and canals. One of these projects, in the Coleambally irrigation area, was well underway in 1959. When completed it will provide additional water for irrigation of some 1,000 farms in the Murrumbidgee section of New South Wales. Most of these farms, estimated at about 400 to 500 acres in size, will be used in mixed farming and fruit production.

The Tinaroo Falls project has been completed in north Queensland. With a water storage capacity of 330,000 acre-feet, this dam should irrigate some 130,000 acres in the Mareeba, Dimbulah, and Atherton areas. About 50 percent of this newly irrigated acreage will be utilized in tobacco production, the remainder in mixed farming and pastures.

The general increase in livestock numbers in recent years has also been assisted by countrywide construction of wells, waterholes, and ponds to conserve greater quantities of rainwater for stock. This practice permits greater utilization of certain pasture areas throughout the entire year.

Technological Improvement

Fertilizers

Use of fertilizers to stimulate crop production and pasture growth has increased in most States since World War II. Total fertilized acreage has expanded from 23 to 42 million acres, most of this increase being in pastures (table 5). About 90 percent of all chemical fertilizer is superphosphate, over half of which is used for pastures. Nitrogen, the other most important fertilizer, is applied chiefly to sugarcane, fruit, and vegetable crops.

Certain sulfur deficiencies long recognized in the soils of South Australia are being corrected by the addition of large quantities of superphosphate. Only in recent years, however, have experiments shown the need in some areas for the addition of such trace elements as molybdenum, boron, manganese, zinc, and copper. These minerals are now mixed with fertilizers as part of the regular fertilizing process. As a result, legume pastures have been established in many parts of South Australia where, previously, sown pastures were unsuccessful. Trace minerals are also being increasingly used in irrigated areas in the production of quality citrus and dried vine fruits.

TABLE 5.—*Area: Farms, fertilized, and quantities of fertilizers used, average 1936-38, annual 1950 and 1957 to 1959*

Year	Total farming area	Total fertilized area	Quantities of fertilizer used				
			Super-phosphate	Ammonium sulphate	Potash ¹	Other ² fertilizers	Total
	Mil. acres	Mil. acres	1,000 ton	1,000 ton	1,000 ton	1,000 ton	1,000 ton
Average: 1936-38.....	897	23	³ 1,101	55	11	56	1,223
Annual:							
1950-51.....	938	28	1,497	110	17	43	1,667
1957-58.....	1,143	40	2,266	151	60	45	2,522
1958-59.....	1,135	42	2,295	149	49	43	2,536
1959-60 ⁴	1,148	43	2,350	³ 130	³ 43	³ 85	2,608

¹ All imported.

² Chiefly nitrogenous-urea, bone meal, etc.

³ Estimated.

⁴ Preliminary.

Commonwealth of Australia Department of Trade. *The Australian Fertilizer Industry*. Canberra. 1960

Unpublished source material.

Mechanization

Despite scarcities and high costs of machinery during the immediate postwar years, Australia made rapid strides in mechanizing agriculture during the 1950's. Tractors increased from 66,000 in 1946 to 225,000 in 1958, mostly in wheat and dairy areas, particularly Victoria and New South

Wales (table 6). Heavy earthmoving tractors have become more numerous in large-scale land-clearing operations in Queensland and Western Australia. Use of milking machines, fertilizer spreaders, and seed drills has also increased significantly.

TABLE 6.—*Farm machinery: Principal items on rural holdings, annual 1946, 1950, and 1958*¹

Type of machinery	1946 ²	1950 ²	1958 ²
	<i>Numbers</i>	<i>Numbers</i>	<i>Numbers</i>
Corn and cotton planters	20, 127	23, 346	(³)
Cultivators:			
Harrows	600, 778	635, 662	(³)
Rotary hoes	8, 947	16, 224	35, 444
Scarifiers	(³)	93, 102	(³)
Other	⁴ 216, 241	182, 366	(³)
Fertilizer distributors and broadcasters	32, 779	44, 058	74, 484
Grain drills	90, 722	93, 102	107, 360
Hay presses and balers	7, 800	11, 018	26, 682
Headers, strippers, and harvesters	⁴ 59, 401	58, 494	61, 112
Milking machines (number stands)	116, 806	155, 218	213, 716
Mowers	57, 453	66, 528	(³)
Ploughs	⁴ 329, 331	298, 313	⁵ 340, 266
Power sprayers	9, 737	12, 364	(³)
Reapers and binders	51, 962	48, 441	(³)
Shearing machines (number stands)	⁶ 93, 178	109, 583	165, 512
Tractors, crawler	8, 536	10, 356	21, 168
Tractors, wheeled	57, 647	93, 439	203, 513

¹ Excludes Northern Territory prior to 1956.

² As of Mar. 31.

³ Not available.

⁴ 1945 data.

⁵ Incomplete. Excludes some types of disk ploughs used in Queensland.

⁶ 1947 data.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part I—Rural Industries, 1957–58*. Bul. 52. Canberra. September 1959.

For a number of years agricultural aviation, a postwar innovation, was largely limited to seeding and fertilizing new land development projects. Since 1957, aircraft have been increasingly used to fertilize and seed pastures, especially in rough hilly areas, and to spray cotton and tobacco against insect and fungus damage.

Insecticides and Fungicides

Improved insecticides and fungicides developed since World War II have had a marked effect in reducing both crop and livestock losses. Their wider use has resulted in larger crops of sugar, tobacco, flaxseed, and cotton. Chemical weed control has likewise proved of great value in grain crop areas. Similarly, tick eradication programs have been successful in most cattle areas of New South Wales and Queensland, while many insects harmful to sheep have been effectively controlled with organic insecticides.



BN-14030

Light plane used for aerial fertilizing and seeding of pastures in New South Wales.

Myxomatosis

One of the greatest achievements in the conservation of pastures and forage crops for livestock was attained in the early 1950's when the introduction of myxomatosis, a virus disease fatal to rabbits, made possible a nationwide program to eradicate rabbits. As the disease spread, the rabbit population rapidly declined, from 500 million in 1950 to less than 100 million by 1953. With the extra pasture and forage crops thus made available, the sheep population increased to 153 million in 1959, as compared with about 112 million prewar. Recently, however, rabbits have become increasingly immune to myxomatosis in some areas, and farmers are experimenting with other eradication methods, including 1080 Poison.

Financial Aid to Farmers

Credit facilities for farmers have been slow in developing. Until recently, long-term farm financing was limited to such private lenders as banks, insurance and trust companies, the Commonwealth Bank's mortgage department, and state-controlled agricultural banks. The only government-guaranteed loans were those made by the Commonwealth Government to ex-servicemen under provisions of the War Service Land Settlement Scheme and limited loans financed by state governments. Short-term and medium-term credit has consisted of loans made by private banks, stock and station agents, wool brokers, hire-purchase companies, machinery firms, merchants, and storekeepers.

A new Commonwealth Development Bank was established in January 1960, primarily to provide financing for farmers and small industrial activities. The bank's lending policy is based largely on financing desirable agricultural endeavors when other means of financing are not available on reasonable terms. This type of loan will also probably fill the credit gap for ex-servicemen who need capital for expansion purposes but can no longer obtain funds under the War Service Land Settlement Scheme, which is being liquidated.

Since 1951, rural capital investment has been indirectly facilitated by a special tax deduction of 20 percent of cost over a period of years allowable on expenditures for such farm improvements as fences, silos, wool sheds, and farm machinery.

Increased capital investment to bring new lands into production or to improve farmland already in use has been stimulated in recent years by tax allowances for expenditures during the year in which improvements are made. Land drainage, soil and water conservation, and pest eradication are among the projects which can be deducted from the farmer's taxable income. These tax exemptions have particularly stimulated expansion of sheep, beef cattle, and grain production in certain areas.

Crop insurance schemes in some states also protect certain types of producers. For example, compulsory hail insurance schemes protect all apple and pear growers in Tasmania. A fund maintained by contributions from producers is also subsidized by the state treasury. Similar schemes in Queensland are administered by the state marketing boards and apply only to wheat, tobacco, and barley.

III. MARKETING POLICY

Aside from wool, which is sold under a free auction system, most of Australia's agricultural products are subject to some form of quasi-state or Commonwealth marketing control. Marketing arrangements vary from commodity to commodity, but most products are marketed through boards or cooperatives under some form of statutory regulations. Sugar is an exception in that its production output and prices are determined by Australia's membership in international sugar agreements.

Marketing Boards

State Commodity Boards

Commodity boards for marketing certain primary agricultural products originated in the principal agricultural states after World War I. These boards were an outgrowth of producers' desires for more security in marketing their products after voluntary cooperatives had become too numerous and competitive to assure marketing stability. These state-legislated boards are still theoretically restricted to intrastate trade, but by voluntary agree-

ments between the states are able to extend their marketing powers from one state to another. All six states have egg boards. Most have fruit, potato, milk, and dairy produce boards. Queensland has about 15 commodity boards and is the most extensively organized area in Australia.

Chief among the state boards active in export functions are the Australian Barley Board, made up of producer representatives from Victoria and South Australia, and the Queensland Sugar Board, which coordinates marketing of all cane sugar produced in Queensland and New South Wales.

The Australian Barley Board is a joint Victoria-South Australian enterprise empowered to act as agent of the Commonwealth or any state in barley transactions abroad. Western Australia and Queensland have separate barley boards which are also permitted to export grain. More than 90 percent of all Australian barley is marketed through one of these three boards, all of which have complicated price-fixing formulas for payments to producers. As a result, Australia is sometimes faced with price competition from its own marketing organizations in certain oversea markets.

Commonwealth Boards

The early Commonwealth boards were set up to improve the quality of export products, but since World War II have developed into organizations which administer export marketing of certain commodities. The eight commodities controlled by boards are wheat, dairy products, eggs, meat, canned fruits, apples and pears, dried vine fruits, and wine. These boards impose levies on exports to provide annual income. Wheat is the only commodity completely controlled by the Commonwealth Government.

AUSTRALIAN WHEAT BOARD.—The largest and most complex of the federally regulated boards, the Australian Wheat Board derives its powers from the Wheat Industry Stabilization Act. All export marketing of Australian wheat and flour is channeled through the board or its approved agents. It is responsible for making advance payments to producers on wheat deliveries, and adjusting fluctuations in export prices by collecting an export tax on all wheat exports. It also administers the Wheat Stabilization Fund. In addition, the board is the largest ship charterer in the country, and regulates the supply of wheat freighters to Australian ports throughout the marketing year.

DAIRY PRODUCE BOARD.—Quasi-governmental in character, the Dairy Produce Board has been charged since 1954 with full authority over exports to the United Kingdom. The board works closely with the Dairy Produce Equalization Committee in the overall administration of dairy products marketing. Domestic and oversea sales of milk products, other than butter and cheese, are generally handled through private trade channels.

AUSTRALIAN EGG BOARD.—The Australian Egg Board does not have exclusive rights to export eggs, but rather facilitates exports by state boards. Acting as agent for the state boards, it purchases surpluses from them and

arranges transactions with foreign buyers, particularly in the United Kingdom.

AUSTRALIAN MEAT BOARD.—This board was set up to regulate meat exports at a time when the U.K. market, traditional outlet for Australian meat, was in danger of being oversupplied. Most of the board's activities have been directed toward promoting trade. Since 1952 its major task has been the administration of the 15-year meat agreement with the United Kingdom. The board conducts negotiations with the U.K. Government in regard to minimum prices guaranteed under the agreement. It also negotiates the size of the *free* quota of meat which can be exported to destinations other than the United Kingdom and colonial areas. However, actual trading activities are left to private concerns, except under special circumstances.

AUSTRALIAN APPLE AND PEAR BOARD.—This board regulates the export trade of fresh apples and pears. Fruit cannot be exported privately without a license from the board. Because of the highly seasonal character of the apple and pear trade, involving a large movement over a brief shipping period, the board plays a very effective role in arranging shipping space for exporters.

COMMONWEALTH DRIED FRUITS CONTROL BOARD.—The Dried Fruits Control Board regulates exports of all dried vine fruits, chiefly through licensing of export shipments. It allocates the fruit in any marketing season between the domestic market and Canada, New Zealand, and other oversea markets; the remainder is then reserved for the United Kingdom, the principal dried fruit market. In the United Kingdom, the board maintains an agency which appraises and fumigates the fruit upon arrival, and performs direct marketing functions with U.K. agents at prices fixed by the board for various grades of fruit. Over 90 percent of Australia's dried vine fruit sold on the U.K. market is handled by two selling agents, one representing cooperatives, the other private packinghouses.

Nearly all Australian packinghouses are members of the Australian Dried Fruits Association, and agree to operate a price equalization arrangement. Since the price of dried fruits in the Australian market is usually higher than the export price, price equalization insures that growers share proportionately in returns from both local and export markets. This is a voluntary arrangement between packers and has no legislative authority.

AUSTRALIAN CANNED FRUITS BOARD.—A Commonwealth organization financed by a levy on exports, this board supervises oversea marketing, and if necessary regulates export sales. It has not state-trading powers. Most of its control is through export licensing.

Cooperatives

In addition to the state and Commonwealth marketing boards, commodities are marketed through private companies and producer-controlled cooperatives. All six states have some form of cooperative legislation.

Cooperative marketing is limited primarily to commodities that must be processed, such as butter, cheese, and dried and canned fruits. Rice and some fresh fruits are also marketed through cooperative channels in certain areas, while cooperatives have been very active in wheat marketing in Western Australia.

The Committee of Direction of Fruit Marketing (COD), a Queensland cooperative subject to statutory legislation, markets certain fruits on a voluntary basis for growers, but at the same time operates compulsory marketing facilities for other fruit producers. The committee handles all exports of bananas and pineapples from Queensland on a compulsory basis. Apples may be sold either through the COD or outside.

The growth of cooperatives in Australia has been slower than in many countries, probably because of the widespread existence of state marketing boards which are more or less competitive with voluntary producer organizations.

IV. TRADE POLICY

Trade Patterns

Despite heavy capital investment in industry in recent years, Australia's economy continues to be extremely dependent on the production of agricultural commodities for export (table 7). More than 80 percent of all trade revenue is derived from exports of wool, wheat, dairy products, meat, fruits, and raw sugar. Wool alone accounts for about 50 percent of total export earnings; wheat another 10 percent.

The United Kingdom is still the primary trade outlet for Australia's farm products, and at present takes about 28 percent by value of total agricultural exports, down from about 55 percent prewar (table 8).

As a member of the British Commonwealth of Nations, Australia enjoys special trade privileges in the United Kingdom and most other Commonwealth markets. Australia is also a sterling area country, receiving certain trading benefits as well as inherited responsibilities from this membership.

During World War II and for a number of years thereafter, agricultural exports to the United Kingdom were channeled through commodity bulk-trading arrangements. Now, however, practically the only remaining vestige of this trade policy is the 15-year meat agreement with the United Kingdom which will not expire until 1967.

With Australia's more rapid economic development, efforts are being intensified to promote exports of all major agricultural surpluses. Greater attention is also being given to diversification of markets away from the United Kingdom. In the last 4 years, there has been an increased trend toward negotiation of bilateral trade arrangements to assure market outlets for much of the country's agricultural produce, particularly wheat, flour, barley, other feed grains, and fruits. The shift in export markets away from the United Kingdom is shown by increased trade with continental Europe and the significant rise in exports to Asian countries, notably Japan.

TABLE 7.—*Trade: Total, agricultural, and percent agricultural is of total, average 1936–38 and annual 1950–59*¹

Year	Total trade		Agricultural trade		Percent agricultural trade is of total	
	Imports ²	Exports ³	Imports	Exports	Imports	Exports
Average:	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars		
1936–38.....	486, 643	721, 997	58, 549	561, 193	12	78
Annual:						
1950.....	1, 660, 689	2, 185, 375	189, 759	2, 007, 477	11	92
1951.....	2, 351, 442	1, 494, 212	193, 968	1, 242, 214	8	82
1952.....	1, 143, 166	1, 933, 772	117, 161	1, 624, 251	10	86
1953.....	1, 520, 042	1, 836, 928	161, 069	1, 550, 683	11	86
1954.....	1, 883, 777	1, 715, 578	204, 051	1, 422, 279	11	85
1955.....	1, 832, 976	1, 720, 522	172, 596	1, 411, 982	9	83
1956.....	1, 605, 368	2, 193, 507	169, 288	1, 758, 055	11	82
1957.....	1, 767, 945	1, 799, 063	173, 183	1, 423, 121	10	80
1958.....	1, 779, 429	1, 780, 598	169, 700	1, 429, 082	10	79
1959.....	2, 069, 377	2, 060, 101	203, 609	1, 638, 638	10	80

¹ Year beginning July

² Excluding specie.

³ Australian produce.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936–37 to 1938–39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1950–51 to 1959–60. Buls. 49–57. Canberra.

TABLE 8.—*Agricultural exports: Value by principal countries of destination, averages 1936–38 and 1950–54, annual 1957–59*¹

Country of destination	1936–38 average	1950–54 average	1957	1958	1959
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
United Kingdom.....	310, 113	574, 197	433, 592	510, 142	465, 120
France.....	44, 223	146, 317	155, 010	102, 514	133, 186
Japan.....	² 28, 943	130, 372	205, 377	203, 450	253, 454
United States.....	23, 518	136, 916	42, 349	84, 862	111, 931
West Germany.....	³ 17, 380	55, 386	68, 728	58, 800	79, 433
Italy.....	14, 767	95, 352	98, 745	69, 525	101, 143
New Zealand.....	7, 429	28, 466	30, 630	27, 391	25, 202
Total.....	446, 373	1, 167, 006	1, 034, 431	1, 056, 684	1, 169, 469
Total all agricultural exports...	561, 193	1, 569, 379	1, 423, 121	1, 429, 082	1, 638, 638

¹ Year beginning July 1.

² Includes Formosa.

³ Includes East Germany.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936–37 to 1938–39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1950–51 to 1959–60. Buls. 49–57. Canberra.

Tariffs

Preferential tariffs govern trade with Commonwealth countries through bilateral agreements negotiated between a number of Commonwealth members. Preferential import duties are levied by Australia on many agricultural items originating in Commonwealth countries, but these are generally considered lower than the rates applying to non-Commonwealth commodities. Most-favored-nation rates apply to most GATT countries, including the United States. Certain commodities are subject to primage duties, which are additional duties levied on nonessential goods.²

There is considerable flexibility in the administration of tariffs. The Minister of Trade has the authority to admit certain imports *free* under bylaw provisions, generally raw materials for industry, for indefinite periods of time. Most cotton is imported under this procedure. Hops have been imported under bylaw provisions in some years, depending on domestic supplies.

Licensing Regulations

Prior to 1958, Australia maintained a comprehensive system of import licensing regulations, an outgrowth of legislation introduced early in World War II. Postwar maintenance of these restrictions was justified because of balance-of-payment difficulties.

No appreciable steps to relax licensing controls were taken until 1958. Not until early 1960 were import controls on most agricultural products eliminated. Licensing restrictions now remaining apply chiefly to imports of oilseeds and vegetable oils.

Quarantine Restrictions

Rigid quarantine restrictions still prohibit entry of such U.S. products as livestock, poultry and poultry products, certain grains, seeds, plant propagation stock, and some processed foods. These restrictions apply except where products originate from sources free of diseases not present in Australia. Thus, animals and materials which would help to advance livestock and plant research are denied entry.

Bilateral Arrangements

Bilateral agreements between Australia and other countries date back to prewar years. Chief among these were the coordinated Ottawa Agreements of 1932 negotiated with the United Kingdom and other Commonwealth nations.

Traditionally, the United Kingdom has been Australia's chief outlet for farm products. But since 1955, in order to expand exports and assure the

² Raw materials are generally exempt from primage. On goods subject to primage, most Commonwealth areas are extended 5 percent ad valorem preferential rates, as compared with 10 percent rates on products from the United States and other non-Commonwealth countries.

best bargaining position for its products, Australia has adopted a policy of diverting its trade to numerous other countries. Some of these new markets have been assured through such bilateral trade agreements as those with Japan, West Germany, Ceylon, the Federation of Malaya, and Indonesia. Other attempts to establish new markets have been initiated in formal trade missions to Africa, Latin America, Europe, the Middle East, and the Far East.

All recent agreements emphasize Australia's desire to secure marketing guarantees for such major agricultural exports as wheat, wheat flour, fruits, meats, dairy products, and coarse grains. In agreements with larger nations, Australia has made every effort to secure quotas for these export items. Because most of these products are competitive with U.S. farm exports, bilateral arrangements are important factors in U.S. sales to Australia's partners in the agreements.

Federation of Rhodesia and Nyasaland

Australia agreed in 1941 to take certain fixed quotas of tobacco from Southern Rhodesia. As part of this transaction it set up a preferential tariff rate for Rhodesian leaf tobacco which has been maintained in the Australian tariff ever since. Renewed and amended from time to time, this agreement was extended in 1955 to cover the entire Federation of Rhodesia and Nyasaland. Latest amendments in 1959 provide duty-free entry into the Federation of Australian dried whole milk and a reduced duty on malting barley. Any decline in dried milk imports is to be offset by increased imports of condensed milk, butter, and cheese.

West Germany

Australia's agreements with West Germany extend back to 1955. The present arrangement, signed in October 1959, established first-year quotas (1959-60) for Australian agricultural products as follows:

	<i>Tons</i>
Wheat (f.a.q.)-----	110,230
Wheat (semihard)-----	55,115
Coarse grains for fodder and industrial use (including malting barley)----- ¹	275,576
Beef, frozen-----	7,168
Mutton and lamb, frozen-----	276
	<i>Gallons</i>
Wine, red and dessert-----	119,000
	<i>\$1,000</i>
Meat, canned-----	179
Tropical fruits, canned-----	357
Fruits, candied-----	24

¹No breakdown was given for individual coarse grains. In 1958-59, Australian exports of oats and barley to West Germany totaled 281,120 tons.

In addition, West Germany agreed that Australia would be included in all German global tenders and share in all future country quotas. The agreement also guarantees Australia a fair share of the German market for butter, cheddar cheese, nonhardened casein, nonfat dried milk, dried whole milk, fresh apples and pears, canned fruit (other than tropical), and jam.

United Kingdom

A 5-year agreement between Australia and the United Kingdom, signed in February 1957, replaced the bilateral Ottawa Agreement of 1932. The new agreement not only preserves the preferential tariff system prevailing between the two countries, but provides new policies governing their trade. Major provisions affecting agricultural trade are as follows:

- The United Kingdom continues free entry for all Australian goods in which Australia has an active trade interest and which were accorded free entry prior to the agreement.

- The U.K. Government maintains existing guaranteed margins of tariff preferences on many commodities of interest to Australia. Chief among these are butter, cheese, certain fresh fruits, dried and canned fruits, pineapple juice, eggs and egg products, dried and condensed milk, honey, tallow, canned meat, barley, oats, wheat flour, milled rice, sorghums, dried peas, dressed poultry, casein, sausage casings, meat extracts, wattle bark, sugar, and coconut oil.

- Reflecting the desire of both Governments to secure combined sales of Australian flour and wheat in the United Kingdom of at least 840,000 tons a year, a special portion of the agreement deals with wheat. The language does not obligate British millers to import this amount. It does, however, clearly indicate that if annual imports fall below the specified minimum, or if Australia in a drought period is unable to furnish 840,000 tons of grain or flour, either Government can request consultations.

- Australia agrees to maintain tariff preferences on imports of U.K. goods already subject to preferential treatment. But Australia also reserves the right to reduce the levels of preference to new guaranteed minimum margins of 7.5 percent on capital goods and 10 percent on certain other goods.

- The new agreement also provides for periodic negotiation, if necessary, of such broad policy issues of mutual concern as disposal of agricultural surpluses and other adjustments in the agriculture of both nations. To facilitate trade between the two areas, the agreement further provides for consultation on such problems as transportation and joint efforts to prevent dumping practices of other nations.

Japan

From an agricultural standpoint, next to the U.K. agreement the agreement with Japan which became effective in 1957 is one of the most important Australia has negotiated in recent years. It provided firm marketing as-

surances for several of Australia's chief agricultural exports through July 1960 as follows:³

- A minimum of 224,000 tons (7.5 million bushels) of soft wheat the first year, with prospects for increased shipments each year during the life of the agreement. This quota for *fair average quality* wheat is outside the commercial marketings of Australia's surplus high protein wheat exported to Japan since 1955.

- Normal shipments of barley to Japan were to be maintained on a competitive and nondiscriminatory basis. For several years prior to this pact, Australia furnished Japan with about 30 percent of its total barley imports.

- Australia was guaranteed equal competitive rights for 40 percent of Japan's annual total exchange allocation for sugar purchases and for 90 percent of Japan's currency allocations for wool imports each year.⁴

- Australia also received special advantages in Japan's system of licensing imports of cattle hides and beef tallow.

- Japan further agreed to extend nondiscriminatory treatment and full competitive rights to imports of Australian dried skim milk and dried vine fruits, chiefly raisins.

- In return for these concessions by Japan, Australia granted Japan most-favored-nation tariff and nondiscriminatory licensing treatment for exports to Australia, but reserved the right, particularly on textile imports, to resort to emergency duties or quantitative restrictions should the volume of imports from Japan seriously damage Australia's industry.

Federation of Malaya

An agreement signed in August 1958 regulates trade between Australia and the Federation of Malaya. Terms of the agreement applicable to agricultural products are as follows:

- The Australian Government grants duty-free entry under its tariff bylaws for Malaya's natural rubber, subject to the satisfactory disposal of Papua's and New Guinea's production.

- In return, Australia receives annual fixed quotas for minimum shipments to Malaya of 89,600 tons of flour and 15,680 tons of wheat.

- Both countries agree to grant most-favored-nation tariff and licensing treatment to each other's products.

- Both nations agree to take remedial action should dumping of rubber or wheat exports from other suppliers injure the trade of either country.

Ceylon

This agreement was intended to reestablish Australia's flour market in Ceylon. Signed in August 1958 and extended late in 1960 to 1962, the pact carried commitments for flour, tea, and desiccated coconut as follows:

³ This agreement remains in force for an indefinite period after 1960 unless either Government gives notice of termination.

⁴ As of Apr. 1, 1961, wool was put on Japan's automatic approval list. This nullifies any special trade privileges extended to Australian wool imports in 1957.

- Australia was to supply Ceylon with 33,600 tons of flour in 1958, and 112,000 tons in both 1959 and 1960. In 1959, Australia was to furnish Ceylon 12,320 tons of flour under the Colombo plan, funds from the sale to be used to finance economic development programs in Ceylon.

- Australia agreed that Ceylon's tea exports would be protected in the Australian market against competition from Taiwan tea.

- Ceylon's exports of desiccated coconut to Australia were to be increased from 9 to 12 million pounds a year.

- Special consideration was also given to the possibility of finding markets in Australia for cottage industry products from Ceylon.

Indonesia

A 1-year trade agreement signed between Australia and Indonesia in December 1959, retroactive to July 1959, was effective through July 1961. This agreement was the outgrowth of Australia's interest, on the one hand, in increasing exports to Indonesia of butter, cheese, dried milk, and wheat flour, in addition to several manufactured items, and Indonesia's desire, on the other hand, to build up a market in Australia for tobacco, timber, spices, oilseeds and nuts, and essential oils.

Canada

An agreement signed with Canada in February 1960 is a revision of the Ottawa Agreement of 1932. The main provision of this agreement, as in the previous one, is the tariff guarantee for commodities of both countries:

- Canada agreed to maintain its present tariff concessions to Australia on lamb, mutton, canned beef, certain canned fruits, brandy and wines, all important Australian export items.

- Canada continues margin of tariff preferences to Australia on raw sugar, meat products, dried fruits, brandy, wines and tallow, thus permitting Australia to enjoy certain trading advantages over nonpreferential suppliers.

- In addition, Canada makes new concessions to Australia on agricultural products such as binding of *free* tariff rates on wool, sheep casings, and sheepskins.

- Australia assures Canada of preferential tariff treatment on most of its exports to the Australian market.

- In the way of new concessions, Australia binds the rates of duty to Canada on canned salmon, canned sardines, and hog casings.

- The agreement further provides for consultation by both governments on Australia's temporary suspension of preferences and application of bylaw provisions, and sets up procedures for discussion of trade matters of interest to both countries.

France

An agreement between the Australian and French Governments in May 1960, later extended to 1962, regulates shipments of flour to Southeast Asian

markets. The French Government agreed to regulate shipments of subsidized flour to Ceylon and Indonesia during the regular marketing season to avoid concentration of exports in any one market. Both nations are to exchange information on flour exports to mutual markets on a regular monthly basis and to facilitate consultation if difficulties should arise.

Export Promotion Programs

For the past 5 years Australia has actively promoted exports of its major agricultural commodities. In 1955, one of the first advertising expenditures in the United Kingdom to increase the sale of Australian foodstuffs totaled well over \$500,000. Since that time, publicity campaigns have been financed jointly by the Commonwealth Government, marketing boards, and private traders. An estimated \$3 million was spent in 1959-60 in the United Kingdom alone.

Trade promotion campaigns and development of new export outlets have been achieved through numerous government-sponsored trade missions traveling to many parts of the world. As a result, Australia's food and other agricultural products have moved in larger quantities to Japan, Southeast Asia, Central and East Africa, Europe, and Canada.

A government insurance program in effect since 1957 has also helped to increase exports. Under this plan, administered by the Exports Payments Insurance Corporation, exporters are insured against unavoidable losses or delays in payments by foreign importers up to 90 percent of the value of Australian goods. The program is financed from insurance fees and payments guaranteed by the Commonwealth Government. Policies totaling over \$168 million had been written as of early 1961. The plan has already made it easier for Australian exporters to compete in many markets abroad and has increased the demand for certain commodities.

V. COMPETITION WITH U.S. FARM PRODUCTS

In the Australian Market

Tobacco

Production has increased significantly since 1957 due largely to special incentives given producers. A government tobacco-mixing regulation requires manufacturers to use specified percentages of domestic leaf in the manufacture of cigarettes and smoking tobacco in order to receive tariff concessions on imported leaf (table 9). As these percentages have increased from year to year, the demand and prices for local leaf have been artificially maintained above normal marketing levels. Manufacturers have complained about high domestic leaf prices, suggesting that the Government reexamine the current protective system. They argue that this system creates a demand for more domestic leaf than is available and helps to keep domestic prices at high levels. Prices of Australian leaf in relation to prices paid



BN-14031

Photo courtesy Australian News and Information Bureau.

Tobacco cultivation near Mareeba, Queensland.

to growers in the United States, Canada, and the Federation of Rhodesia and Nyasaland are shown in table 10.

The record 1959-60 crop was more than double the 1956-57 output. By 1959-60, some plantings of newly irrigated land in the Mareeba-Dimbulah area came into production. At the present rate of increase, it is predicted that acreage in northern Queensland alone can be doubled in the next 5 years.

TABLE 9.—Tobacco: Minimum domestic leaf percentages manufacturers must use to qualify for duty concessions on imports, 1952 to 1961

Year ¹	Cigarette tobacco	Smoking tobacco
1952.....	3.0	2.0
1953.....	6.0	10.0
1954.....	6.0	12.5
1955.....	7.5	17.5
1956.....	7.5	17.5
1957.....	12.5	21.0
1958.....	15.5	16.5
1959.....	22.0	23.5
1960.....	28.5	24.5
1961.....	35.0	31.0

¹ Year beginning July 1.

U.S. Department of Agriculture, Foreign Agricultural Service. *Australia—Important Market for U.S. Tobacco.* Foreign Agr. Cir. FT 13-60. Washington, D.C., November 1960.

U.S. Foreign Service Despatches.

TABLE 10.—*Flue-cured tobacco leaf: Average prices per pound to farmers in Australia as compared with prices in selected countries, 1952–59*

Year	Australia ¹	United States	Canada	Fed. of Rhodesia and Nyasaland
	<i>U.S. dollars</i>	<i>U.S. dollars</i>	<i>Canadian dollars</i>	<i>U.S. dollars</i>
1952.....	0.93	0.503	0.418	0.500
1953.....	1.40	.528	.439	.463
1954.....	1.42	.527	.434	.447
1955.....	1.25	.527	.461	.472
1956.....	1.16	.516	.464	.384
1957.....	1.16	.555	.493	.459
1958.....	1.24	.582	.465	.425
1959.....	1.28	.583	.559	.402

¹ Year beginning July 1.

U.S. Department of Agriculture, Foreign Agricultural Service. *Canadian Tobacco Production and Trade*. Foreign Agr. Serv. M-29. Washington, D.C. January 1958.
 Canada Department of Agriculture. *The Current Review of Agricultural Conditions in Canada*. Ottawa. November 1959 and November 1960.

U.S. Department of Agriculture, Agricultural Marketing Service. *The Tobacco Situation*. TS-93. September 1960.

Yields have been increased by research advances in curbing plant diseases and improving plant strains. Research efforts are also being directed toward improving the conditioning of the leaf for a higher quality product for manufacturing. In addition, it is recognized in some areas that changes may be necessary in such marketing techniques as packaging and grading of leaf. In northern Queensland, for instance, tobacco leaf is baled like wool and appears to be difficult to inspect and classify on the auction floor.

During 1959–60, Australian tobacco growers produced more than 20 percent of the leaf used in manufacturing; in 1960–61, domestic production will probably meet about 25 percent of local requirements. Much of this higher production is expected to be stimulated by greater use, in 1960–61 and 1961–62, of domestic tobacco in cigarette and cut tobacco manufacture. Domestic leaf used in cigarettes increased from 22 percent in 1959–60 to 28.5 percent in 1960–61, and will increase to 35 percent for 1961–62. Similar increases have occurred in the use of domestic leaf for cut tobacco manufacture, from 23.5 percent in 1959–60 to 24.5 percent in 1960–61, with a further increase to 32 percent expected in 1961–62.

The United States faces additional competition in the Australian market from trading privileges extended to tobacco leaf from the Federation of Rhodesia and Nyasaland. In addition to a tariff preference of 9d. (8.4 cents) per pound on tobacco leaf from the Federation, Australia has for several years guaranteed a market, under a special purchase agreement, for 9.7 million pounds of unmanufactured tobacco or 6.5 percent of the Federation's total crop, whichever amount is smaller.

TABLE 11.—*Tobacco: Area, production, yield, and imports by country of origin, average 1936-38, annual 1952-60*¹

Year	Area	Production	Yield	Imports ²								Available supply
				United States	Indo-nesia	Philip-pines	Federation of Rho-desia and Nyasaland	Canada	Cuba	Other	Total	
Average: 1936-38.....	Acres 9,960	1,000 lbs. 5,000	Per acre 502	1,000 lbs. 22,000	1,000 lbs. 178	1,000 lbs. 90	1,000 lbs. 75	1,000 lbs.	1,000 lbs. 109	1,000 lbs. 86	1,000 lbs. 22,538	1,000 lbs. 27,538
Annual:												
1952.....	7,922	6,000	819	24,000	83	.....	7,900	2,700	63	738	35,484	41,484
1953.....	8,246	3,000	930	24,000	54	.....	9,500	2,300	42	920	36,816	44,816
1954.....	9,661	7,000	706	29,000	82	.....	10,900	2,600	70	607	43,259	50,259
1955.....	11,306	6,000	540	32,000	94	.....	11,000	2,100	50	854	46,098	52,098
1956.....	12,172	9,000	716	28,000	53	.....	10,100	1,700	21	508	40,382	49,382
1957.....	13,204	11,600	876	34,000	16	.....	8,400	82	52	485	43,035	54,635
1958.....	16,205	14,000	922	28,000	.....	.....	10,300	40	93	437	38,870	52,370
1959.....	19,600	20,300	1,036	23,500	.....	.....	11,900	33	63	1,500	37,001	57,301
1960.....	30,200	31,100	1,030	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)

¹ Year beginning July 1.

² Unmanufactured tobacco.

³ Not available.

U.S. Department of Agriculture, Foreign Agricultural Service, Tobacco Division.

Commonwealth Bureau of Census and Statistics, *Oresea Trade, 1959-60*, Bul. 57, Canberra, November 1960.

Commonwealth of Australia Bureau of Agricultural Economics, *Trends in Australian Rural Production and Exports*, No. 14, Canberra, December 1960.

Prewar, the United States supplied over 80 percent of Australia's total tobacco leaf requirements. Since that time the U.S. share has dropped due to increased domestic production and larger imports from the Federation of Rhodesia and Nyasaland. In 1959-60, imports of unmanufactured tobacco from the United States accounted for only about 40 percent of the total supply (table 11).

Cotton

Production has been limited chiefly to southern Queensland, with varieties adapted to both irrigated and nonirrigated land. The main cotton-growing areas in Queensland are located in the Rockhampton area, including sections in the Dee and Don River Valleys and the Theodore and Moura districts of the Dawson Valley.

Despite efforts of the Commonwealth Government to establish cotton in Australia by a direct subsidy scheme, the volume of production in most of the postwar years did not increase significantly. In 1959-60, however, the crop amounted to 3.5 million pounds of lint cotton, about double the production of previous years; harvested acreage of approximately 20,000 acres was about twice that of the previous season. Production in 1960-61 is estimated at 5.5 million pounds, or 55 percent above that of 1959-60 (table 12).

Until the last few years, cotton production was limited generally to small family enterprises and combined with dairying. To preserve flexibility in farm incomes and take advantage of the greater efficiency of mechanization, cotton culture is now advocated on a much larger scale than in former years. Cotton is being introduced in crop rotation programs with grain and pasture crops in both irrigated and nonirrigated sections of Queensland, New South Wales, and Western Australia.

There appears to be no limit on the land available for expansion of this crop in Queensland. Considerable testing since 1954 in the brigalow or scrub tree areas, Dawson Valley, and north Darling Downs of southern Queensland indicates that these regions are advantageous for increased cotton production. Experimental work with cotton as an alternative crop for rice and pastures is also underway in irrigated parts of New South Wales.

In 1953, the Commonwealth Government enacted a policy of guaranteeing cotton prices to producers through 1963. This guarantee of 14d. (13 cents) per pound for seed cotton becomes effective when the farmer delivers cotton above the grade of *strict good ordinary* to a common carrier. In recent years, these subsidy payments have averaged about £A30 (\$67) a bale. The Commonwealth Government has paid actual cash bounties in many crop years when the market price for cotton fell below 14d. per pound. These bounty or deficiency payments, above the average returns paid the farmer from the overall operations of the Cotton Marketing Board, have averaged since 1957 about 5d. (5 cents) per pound of seed cotton. The entire marketing scheme in Queensland is administered by the Cotton Marketing Board which functions as a compulsory pool or cooperative for cotton growers.

TABLE 12.—*Cotton: Area, production, and imports, by country of origin, average 1936–38, annual 1950–60*¹

Year ²	Area ³	Production ⁴	Imports				Supply	
			United States	Mexico	India	Pakistan	Other	Total
Average: 1936–38.....	<i>Acres</i> 60,454	<i>1,000 lbs.</i> 5,213	<i>1,000 lbs.</i> 4,094	<i>1,000 lbs.</i>	<i>1,000 lbs.</i> 4,870	<i>1,000 lbs.</i>	<i>1,000 lbs.</i> 595	<i>1,000 lbs.</i> 9,559
Annual:								
1950.....	2,952	408	.....	.....	4,064	24,813	16,323	45,200
1951.....	4,480	520	21,370	.....	959	2,794	18,173	43,296
1952.....	5,866	808	6,789	99	1,302	10,685	5,921	24,796
1953.....	8,965	1,899	16,518	.....	2,649	17,302	7,734	44,203
1954.....	8,377	1,331	25,916	49	363	9,662	7,198	43,218
1955.....	13,290	1,983	15,782	10,450	1,175	9,248	959	37,611
1956.....	11,338	1,409	33,756	10,213	342	1,691	1,802	47,801
1957.....	10,364	1,254	33,351	7,398	562	619	618	42,578
1958.....	10,493	1,480	24,238	17,393	605	235	1,513	43,981
1959.....	20,200	3,515	27,308	11,250	700	386	1,875	41,519
1960.....	42,000	5,476	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)	(⁵)

¹ Excluding linters and waste.

² Year beginning July 1.

³ Harvested acreage.

⁴ Ginned cotton, converted from seed cotton at 35 percent for pre-war years; 37 percent 1950–60.

⁵ Not available.

Commonwealth Bureau of Census and Statistics, *Primary Industries, Part I—Rural Industries*, 1958–59, Bul. 53, Canberra, July 1960.

Commonwealth Bureau of Census and Statistics, *Overseas Trade*, Years 1936–37 through 1938–39; 1950–51 through 1959–60, Canberra.

Commonwealth of Australia Bureau of Agricultural Economics, *Trends in Australian Rural Production and Exports*, No. 13, Canberra, June 1961.

As with tobacco, a mixing regulation allows cotton manufacturers a tariff waiver of 1.5d. (1.4 cents) per pound on imports of U.S. and Commonwealth cotton and 3d. (2.8 cents) per pound on Mexican cotton, provided manufacturers buy all domestic supplies of spinning quality cotton prior to negotiating for imports.

The United States furnished over 25 percent of Australia's raw cotton imports prewar. During World War II, a larger proportion of Australia's cotton requirements was supplied from Commonwealth sources. Since 1955, however, the United States has supplied, on an average, about two-thirds of the market, with Mexico the second largest supplier.

Hops

Australia ranks as the world's eighth largest producer and among the world's largest consumers of hops. Production and consumption have increased substantially since the 1930's, due chiefly to the fact that beer production has increased more than $2\frac{1}{2}$ times since 1938-39. About 80 percent of the hops production is concentrated in Tasmania, while the next largest producing area is Victoria.

Imports of hops to supplement production in recent years have averaged from 14 to 37 percent of production, depending upon local output (table 13). Most of these imports have come from the United Kingdom, with smaller amounts from New Zealand (table 14).

Normally, hops are subject to tariff restrictions, with preferential rates of 4.5d. (4 cents) per pound extended to the United Kingdom, and 9d. (8 cents) to New Zealand; a most-favored-nation rate of 1s. (11 cents) is applicable to U.S. hops. Periodically, particularly in low stock years, imported hops have been admitted free from all sources under tariff bylaw regulations.

The United States, which produces quality hops in Idaho and the Pacific Coast states, has usually been able to undersell the United Kingdom in the Australian market. In 1960, for example, it was estimated that U.S. hops could be marketed in Australia at about one-half the price of U.K. hops. However, the United States has never been able to sell any great quantities of hops in the Australian market, even when Australia adopted an *all countries* budget scheme to buy certain commodities, including hops, from the cheapest source. Some of this difficulty has been attributed to the lack of intensive market promotion by U.S. exporters, as well as to Australia's market fluctuations from year to year because of uneven domestic output.

Domestic hops are expected to be in short supply during the next 2 or 3 years due to the fact that hop fields in Tasmania suffered greatly from floods in April 1960. To what extent the United States will be able to market hops in Australia depends on 1961 production in New Zealand as well as in the United Kingdom.

TABLE 13.—*Hops: Production and supply, averages 1936–38 and 1952–56, annual 1957–59*

Year ¹	Production	Net imports	Available supply ²
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Average:			
1936–38.....	1,174	64	1,238
1952–56.....	1,753	643	2,397
Annual:			
1957.....	1,848	251	2,100
1958.....	2,053	474	2,528
1959.....	1,830	.....	1,830

¹ Year beginning July 1.

² Disregarding stock movements.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936–37 to 1938–39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952–53 to 1959–60, Buls. 51–57. Canberra.

Unpublished sources.

TABLE 14.—*Hops: Imports by country of origin; averages 1936–38 and 1952–56, annual 1957–59* ¹

Country	1936–38	1952–56	1957	1958	1959
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	1	540	172	463	.....
Czechoslovakia.....	1	.....	.....	.....	.....
New Zealand.....	55	68	68	.....	.....
West Germany.....	.....	4	.....	(?)	.....
United States.....	7	26	.....	.....	.....
Yugoslavia.....	.....	4	11	11	.....
Other countries.....	(?)	1	.....	.....	.....
Total.....	64	643	251	474	0

¹ Year beginning July 1.

² Negligible.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936–37 to 1938–39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952–53 to 1959–60. Buls. 51–57. Canberra.

In World Markets

Wheat

Wheat yields are improving in Australia. In contrast to 12-bushel yields during the 3-year period 1936–37 to 1938–39, yields have averaged 17 bushels per acre since 1950–51, due in large measure to improved, hardier varieties more suited to dry weather conditions.

Changes have also been noted in crop areas. In the late 1930's, about 55 percent of total production was concentrated in New South Wales and

Victoria. Now approximately one-third of the crop is grown in Western Australia alone.

For many years Australia's wheat industry has been based on the production and marketing of a soft *fair average quality* wheat. Emphasis is now being placed on the development of higher protein varieties and better-baking-quality wheats to satisfy marketing demands at home and abroad. Considerable research is underway or planned for the development of harder wheats, particularly in Western Australia and Queensland. Further, the influx of Italian immigrants into Australia has increased the demand for such grain products as macaroni, spaghetti, and semolina. Special attention has thus been given to production of durum wheat, and noticeable increases in acreages of this type have been reported in New South Wales and Queensland.

Australia's wheat exports fluctuate considerably, particularly during drought periods when crops are reduced. In the past 4 years, shipments of wheat and flour abroad averaged about 95 million bushels annually, including exports of only 52 million bushels in 1957-58 when dry weather conditions lowered production to about 50 percent of normal. Of about 170 million bushels produced in most years, domestic consumption generally takes 70 to 75 million bushels. Stocks accumulate during good production years, but in 1957-58 stocks became so dangerously low that 1.5 million bushels were imported from Canada (table 15). From 1955-56 to 1959-60, Australia's wheat carryover never rose above 1 year's domestic consumption needs. This is not an exorbitant stock position in view of the country's periodic susceptibility to droughts, but spokesmen for the Wheat Board and producers' organizations have attributed the maintenance of high stocks to the Public Law 480 program of the United States and its effects on Australia's wheat export trade.

Since World War II the introduction of bulk-handling equipment has facilitated the Wheat Board's movement of wheat in commercial channels. This is particularly true at Fremantle, Western Australia, where much of Australia's wheat exports move into foreign commerce. An estimated 10 percent of the country's wheat crop is bagged, but bulk-handling facilities are being introduced in all states as rapidly as possible.

Shifts in market destinations for Australia's wheat and wheat flour have been noted in the postwar period. Before World War II, approximately 50 percent of all exports went to the United Kingdom; since 1952, exports to the United Kingdom have averaged about 594,000 tons, or less than 40 percent of prewar shipments. This decline has been offset, however, by increased exports to other markets such as New Zealand, Japan, the Federation of Rhodesia and Nyasaland, West Germany, Aden, the Federation of Malaya, Singapore, and Ceylon (table 31).

Prewar, Australia's wheat and flour exports were most competitive with U.S. shipments to the United Kingdom, Ireland, Hong Kong, the Philippines, China, Malta, and Greece. Both areas now contend for markets in

TABLE 15.—*Wheat: Production and distribution, average 1936-38, annual 1954-59*¹

Year ²	Opening stocks	Production	Domestic supply	Local consumption	Exports	Closing stocks	Total disappearance
Average:	<i>Mil. bu.</i>	<i>Mil. bu.</i>	<i>Mil. bu.</i>	<i>Mil. bu.</i>	<i>Mil. bu.</i>	<i>Mil. bu.</i>	<i>Mil. bu.</i>
1936-38.....	10.2	164.7	174.9	54.8	105.6	14.5	174.9
Annual:							
1954.....	94.9	168.6	263.5	68.0	100.5	95.0	263.5
1955.....	95.0	195.4	290.4	74.3	131.9	81.2	290.4
1956.....	84.2	134.5	218.7	69.7	107.5	41.5	218.7
1957.....	41.5	97.6	³ 140.6	72.4	51.7	16.5	140.6
1958.....	16.5	215.1	231.6	67.3	98.9	65.4	231.6
1959.....	65.4	198.5	263.9	79.0	123.7	61.2	263.9

¹ Includes flour in terms of wheat.

² Year beginning Dec. 1.

³ Includes 1.5 million bushels imported.

Commonwealth of Australia, Bureau of Agricultural Economics. *Wheat Situation*, No. 17. Canberra. February 1961.

Commonwealth Economic Committee. *Grain Bulletin*. Vol. VI, No. 10. London. March 1961.

India, Pakistan, Japan, the Philippines, West Germany, Austria, the Federation of Rhodesia and Nyasaland, the Republic of South Africa, and Mozambique, as well as Hong Kong, the Federation of Malaya, and Singapore. With U.S. market development programs encouraging the use of more wheat in Japan, Australia's exports to that market since 1954 have averaged more than double the amounts exported prewar.

Australia's exports of wheat to markets which are mainly competitive with U.S. shipments are now consigned under long-term bilateral arrangements. For example, U.S. shipments to the United Kingdom must compete with Australia's annual quota of 28 million bushels of wheat and flour. In the Japanese market, Australia receives a guarantee for 7.5 million bushels of *fair average quality* wheat each year. Both Ceylon and Malaya are protected markets for Australian flour; since 1959, the Ceylon pact has provided for annual minimum quotas of 112,000 tons, and the Malaya agreement, 89,600 tons per year. Australian wheat exports also compete with U.S. wheat shipments to West Germany. Annual marketing guarantees in favor of Australia tend to limit U.S. shipments, regardless of any competitive advantages which may prevail for U.S. wheat or flour. Traditional markets for Australian flour which still prevail in Singapore and Indonesia will tend to restrict expansion of U.S. sales there.

Coarse Grains

Production of barley and oats, the two primary coarse grain crops, fluctuates from year to year as a result of dry weather conditions in the principal producing areas and general market situation for these two grains.

With the high production in 1958-59, Australia developed new marketing outlets for exports of these grains, particularly through negotiation of bilateral trade arrangements.

BARLEY.—Australia is considered one of the chief barley-exporting countries of the world. Barley is its second largest grain export, and, as a Commonwealth exporter, Australia is second only to Canada. Since 1952, annual exports have averaged about 600,000 tons per year (table 16). In 1958-59 a record crop six times prewar output resulted in record exports. Although the 1959-60 crop was poor because of dry weather conditions in South Australia, the major producing and exporting state, the 1960-61 output was high, exceeding 1958-59 production by 3 million bushels.

Approximately 90 percent of the barley produced is of the two-row type. This grain is used chiefly for malting purposes, although some six-row malting varieties are also grown and are becoming increasingly popular in Western Australia. In contrast to wheat, a grading system is maintained by the Australian Barley Board for three varieties of malting and one feed barley for each two-row and six-row type. Prices to producers are based on these grades.

For many years the United Kingdom was the major outlet for Australia's barley, but exports to Japan rose sharply following a government-to-government barley sale in 1952-53. Until shipments ended in 1960, Japan was Australia's largest barley market, taking about 40 percent of all exports. Since 1958, another two-fifths of Australia's barley exports have been consigned to Common Market countries, chiefly the Netherlands, West Germany, and Belgium-Luxembourg. Other sizable exports have been made to the United Kingdom and Denmark.

Australian barley in the prewar period was marketed principally in competition with U.S. barley in the United Kingdom and Belgium. Since World War II, this major area of competition has been extended to include Japan, the Netherlands, West Germany, and Denmark.

OATS.—Oats are produced largely in New South Wales, Victoria, and Western Australia. Acreages in Western Australia and New South Wales are three and four times prewar levels, and yields in both states are considerably higher. Western Australia supplies over 50 percent of the nation's oats exports. Prewar, Australia produced some 21 million bushels, or about 420,000 tons. In 1958-59, a record year, 109 million bushels or over 2 million tons were produced, of which 342,000 tons, or about 15 percent, were exported.

There are no compulsory state or Commonwealth marketing boards for oats. Western Australia has a Voluntary Oats Pool which is regulated by legislative authority and handles most of the oats produced in that state. Some oats in Victoria and South Australia are marketed through pools maintained by cooperatives or private merchants.

TABLE 16.—*Barley: Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*¹

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	61,470	121,762	61,059	91,274	117,583
Belgium-Luxembourg....	² 7,832	44,166	41,816	56,850	10,049
Denmark.....		7,921		26,912	20,885
West Germany.....		³ 40,136	80,590	111,784	239,752
Japan.....	2,996	256,068	213,883	307,014	36,079
Netherlands.....		56,112	69,353	130,368	84,165
Italy.....		6,853	6,236	8,286	91,824
New Zealand.....	10,967	3,118			
Other countries.....	237	42,039	8,682	12,581	24,982
Total.....	83,502	578,115	481,619	748,099	625,319

¹ Year beginning July 1.

² Belgium only.

³ Includes East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936-37 to 1938-39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

Only about 1 percent, or about 4,000 tons, of prewar production was exported, mostly to the United Kingdom, New Zealand, and Malaya (table 17). Since 1950, West Germany rather than the United Kingdom has become the main market for Australian oats. Like barley, Australian oats enjoy preferential tariff benefits in the U.K. market which tend to discriminate against the U.S. and other suppliers. In addition, substantial amounts were also exported in 1958-59 to the Netherlands and Italy. As a result of this market shift, the Common Market countries now receive almost 65 percent of Australia's total exports of oats, or well over 224,000 tons annually.

U.S. exports of oats fluctuated considerably prewar, but the majority of shipments went to Canada. After World War II, however, most U.S. trade shifted to European countries, chiefly West Germany, France, and the Netherlands. From 1950 to 1955, the United States was a net importer of oats, primarily from Canada. Since then, the United States has again entered the market, exports for the past 5 years averaging 448,000 tons. Most shipments have been made to West European countries where they compete, primarily in the Netherlands and West Germany, with Australian oats.

Rice

Although Australia is not considered one of the important rice-producing areas of the world, certain characteristics of its production and exports are of interest to the U.S. exporter.

TABLE 17.—*Oats: Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*¹

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	1,761	29,895	8,776	68,336	11,581
New Zealand.....	585	4,292			
Belgium-Luxembourg.....		12,582			398
West Germany.....		² 44,710	19,295	169,119	163,108
Netherlands.....		11,440	3,763	29,608	34,383
India.....	114	1,590		222	488
Denmark.....		3,877		5,622	2,929
Italy.....		17,089		27,844	20,563
Japan.....	32	1,059			1,633
Ceylon.....	343	782	424	552	356
Malaya, Federation of...	681	1,077	520	539	678
Singapore.....		1,074	432	575	487
Other countries.....	617	13,599	12,702	48,731	2,782
Total.....	4,073	143,066	45,912	351,148	239,386

¹ Year beginning July 1.

² Includes East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936-37 to 1938-39.* Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952-53 to 1959-60.* Buls. 51-57. Canberra.

While rice production, mostly of the short-grain type, is confined chiefly to the irrigated sections of New South Wales, it has expanded rapidly since its introduction in the early 1920's. Output in the late 1930's totaled approximately 2 million bushels. The 1960-61 crop is estimated at three times prewar, or about 6 million bushels. Overall yields in 1960-61 were estimated at 133 bushels per acre, an increase of about 28 percent over prewar. These yields are among the highest in the world.

A highly mechanized crop in Australia, rice is grown on a 6-year crop rotation pattern with cultivated pastures of ryegrass, clovers, and alfalfa.

In this rotation no fertilizer is used on the rice, which derives its fertilization from superphosphates applied to pastures, nitrogen from the legumes, and natural fertilization by cattle and sheep on the pastures.

Production is stimulated by a fixed-price guarantee to producers set by the Rice Marketing Board, but at the same time production is controlled by the amount of water made available for irrigation of this crop by the New South Wales Irrigation Commission. So far water supplies have been adequate. However, with the highly competitive situation for marketing Australian rice in foreign markets, and with competition in the Murrumbidgee irrigation area for water for other crops, irrigation may become a production-determining factor in the future.



BN-14027

Rice harvesting near Griffith, New South Wales.

Considerable investment to promote rice production has been made in the Northern Territory, where natural water facilities are available, and in Western Australia, where dryland cultivation is underway. Although both areas are reported to have good production potential, so far very little commercial grain has been produced.

Australia exports over 50 percent of its total production, chiefly to New Zealand, Australian Territories, and other Pacific island areas. It is significant, however, that since 1958-59 increases in exports have been made to both the United Kingdom and Canada (table 18).

The United Kingdom has been a traditional outlet for Australian rice, but sizable exports to Canada are a recent development. Both markets are important to U.S. trade. In 1959-60, the United States exported 32 million pounds to Canada and 47 million pounds to the United Kingdom, as compared to Australian exports of 8 million pounds to Canada and 22 million pounds to the United Kingdom.

Fruits

Australia's varied climatic conditions favor the production of a variety of fruits. Approximately two-fifths of the apples are produced in the fertile river valleys of Tasmania, another one-fifth in Victoria. Most pears are grown in Victoria, while dried and citrus fruit production is concentrated in the irrigated Mildura and Renmark sections of Victoria and South Australia.

The main stone fruit areas are located in the Murrumbidgee and Murray River areas of New South Wales and the Goulburn Valley of Victoria. Pineapple and other tropical fruits are intensively cultivated in southern Queensland.

TABLE 18.—*Rice: Exports by country of destination, averages 1936–38 and 1952–56, annual 1957–59*¹

Country	Average		1957	1958	1959
	1936–38	1952–56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	11,474	7,280	6,437	13,795	10,942
New Zealand.....	1,652	2,542	3,149	2,566	2,201
Pacific Islands, British.....	² 1,257	4,570	5,279	6,054	6,783
Pacific Islands, French.....	160	2,121	916	2,188	850
Canada.....	372	823		1,910	4,202
Australian Territories.....		13,035	16,964	16,339	20,550
Netherlands.....		1,008	1,115	1,455	612
Hong Kong.....					1,686
Lebanon.....					12,061
Other countries.....	136	4,894	2,110	4,856	14,116
Total.....	15,051	36,273	35,970	49,663	74,003

¹ Year beginning July 1.

² Includes Australian Territories.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936–37 to 1938–39*. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952–53 to 1959–60*. Buls. 51–57. Canberra.

Production of deciduous fruit is limited by poor drainage conditions in some parts of Australia. Costs of tile draining the land are high, but when large areas of peach and apricot trees in the Murrumbidgee area and the Goulburn Valley were destroyed by flooding in 1956, some of these acreages were drained and replanted.

APPLES AND PEARS.—Australia's postwar apple production has not only increased about 2 million bushels per year as compared to output prewar, but this higher fruit yield has been derived from a much smaller acreage. The bearing acreage of apples in 1959–60 was estimated at 66,000, as compared with an average of 81,000 in the late 1930's. Principal varieties produced for export are Sturmer, Jonathan, Granny Smith, Cleopatra, and Democrat.

During the calendar year 1958, Australia was the world's largest exporter of apples after Italy. Most apples and pears are exported on forward sales, although in 1960 the Apple and Pear Board permitted the export of both fruits to some European markets on consignment. This change in marketing policy was partly due to competition from other exporters who marketed on a consignment basis, and to the fact that there has been considerable

buyer resistance and an overall weakness in foreign markets, particularly in Europe, during the past two seasons.

Shipments to the United Kingdom now represent over 60 percent of total exports (table 19). Noticeable changes in postwar trade have resulted in increased exports to West Germany, Sweden, Singapore, and Hong Kong. Although the United States and Australia market their fruit in Europe in opposite seasons, they still compete. Marketing periods for fresh apples from the United States and Australia overlap in the United Kingdom, Sweden, and West Germany because of increased modern cold storage facilities in these countries. U.S. apples also compete with Australian varieties in Canada, Belgium-Luxembourg, the Netherlands, the Philippines, and Hong Kong.

TABLE 19.—*Apples: Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*¹

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	80,816	64,391	79,789	76,718	64,474
Malaya, Federation of....	1,247	384	721	802	1,382
Singapore.....	(²)	5,776	3,461	3,739	2,511
Belgium-Luxembourg....	2,034	1,904	2,258	113	549
West Germany.....	³ 4,348	6,390	8,304	4,529	14,517
Netherlands.....	1,437	554	5,850	2,465	1,561
Hong Kong.....	276	859	945	969	1,912
Norway.....	412	637	2,924	221	670
Sweden.....	2,575	10,334	13,702	10,102	9,938
France.....	913				
India.....	480	1,393	562		
Other countries.....	3,586	2,743	5,187	4,241	5,067
Total.....	98,124	95,365	123,703	103,899	102,581

¹ Year beginning July 1.

² Included in Malaya.

³ Included East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936-37 to 1938-39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

Pear production, averaging around 5 million bushels per year, is centered in Victoria, although sizable quantities are produced in New South Wales, Tasmania, South Australia, and Western Australia. Main varieties are William Bon Chretien, Bartlett, Josephine, Winter Cole, and Winter Nelis. Like apples, about 70 percent of all pear exports are destined for the United Kingdom (table 20). While traditionally Sweden has been the second largest market, West Germany in 1959-60 accounted for about 14 percent of total shipments.

TABLE 20.—*Pears: Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*¹

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	13,942	20,677	24,804	15,982	21,063
Malaya, Federation of.....	168	.....	.....	.....	119
Singapore.....	(²)	284	329	500	595
Belgium-Luxembourg.....	.....	500	629	762	351
West Germany.....	³ 175	78	388	959	.....
Norway.....	.....	31	525	1,065	1,555
Sweden.....	157	3,322	5,665	4,456	4,726
Netherlands.....	.....	18	.....	100	165
Finland.....	.....	.....	.....	629	861
Other countries.....	395	218	235	307	439
Total.....	14,837	25,128	32,575	24,760	29,874

¹ Year beginning July 1.

² Included in Malaya.

³ Included East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936-37 to 1938-39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

CANNED FRUITS.—The canned fruit industry made great strides in the 1920's and 1930's, assisted by a minimum price to fresh fruit growers and by the joint policy of the Commonwealth and Queensland Governments providing sugar assistance to canned fruit processors. Rebates are paid on the sugar content of processed fruits entering both the domestic and export trade. The variable rebates applying only to fruits processed for export enable Australian processors to compete against canned fruits from other countries which are presumably made with cheaper sugar.

Most of Australia's canned fruits are sold on annual forward sales under contract to British buyers. Eighty-eight percent of the pack went to the United Kingdom during 1959-60, with the remainder exported as follows: 4 percent to Canada; 1 percent to West Germany; 3 percent to New Zealand; and small amounts to Southeast Asian countries (table 21).

Prewar exports to such Commonwealth areas as the United Kingdom, Canada, and New Zealand were further assisted by the preferential tariffs for Australian canned fruits in the Ottawa Agreements of 1932, which enabled Australia to meet competition in the various Commonwealth markets. At that time, the United States was a particularly large exporter of canned fruits to the United Kingdom.

United States and Australian canned fruit, principally peaches and pears, compete in such foreign markets as Canada and the United Kingdom, and most recently, West Germany. Although Australian and United States

canned fruit packs enter the U.K. and Canada at different seasons, long-range market planning causes overlapping in actual sales which tends to extend competition over the entire year.

TABLE 21.—*Canned fruits:*¹ *Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*²

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	32,856	78,881	76,120	86,905	88,361
Canada.....	1,914	1,810	1,861	5,066	3,620
New Zealand.....	3,160	5,012	2,781	1,201	2,670
India.....	211	72	4	6	
Indonesia.....	150	90	(3)	(3)	
Singapore.....	(4)	1,336	286	261	196
West Germany.....		⁵ 186	614	1,529	1,187
Other countries.....	377	2,750	913	3,010	3,602
Total.....	38,698	90,110	82,585	98,011	99,939

¹ Excludes purees, jams, jellies, juices, etc.

² Year beginning July 1.

³ Negligible.

⁴ Included with Malaya.

⁵ Included East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics, *Oversea Trade and Customs and Excise Revenue*, 1936-37 to 1938-39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics, *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

Australia was protected from competition in the U.K. market by a U.K.-Australian purchase agreement for specific amounts of canned fruits effective through the 1954 season. After that time, dollar restrictions imposed on imports from the United States limited competition for Australia in the U.K. market. Since 1958, however, the United Kingdom has relaxed restrictions on imports of U.S. fruits, and competition between the two areas has again increased.

Australian canned fruit packs provide keen competition for U.S. products in the United Kingdom. In the last 3 years, Australia's shipments have averaged over 3 million cases, or about 60 percent of its entire pack, as compared with U.S. shipments of from 200,000 to 1.2 million cases. U.S. canned peaches are particularly competitive with the Australian product in the U.K. market.

The British Government grants import duty preferences on most canned fruit items from Commonwealth areas. A 0.625 percent sugar duty is levied on canned apricots, peaches, and pears from Australia, as compared to 1.25 percent duty, plus a 12 percent ad valorem rate, on the same products from the United States, thus making it more difficult for U.S. products to compete in the U.K. market.

With the exception of pears, the Republic of South Africa in late years has outranked both Australia and the United States in exports of canned fruits to the United Kingdom. The U.S. portion of the market has increased since the United Kingdom increased dollar import quotas in 1959. Even greater import allocations of canned fruits from the dollar area were permitted in 1960. This greatly benefited U.S. exporters, as 1959 canned fruit packs in both Australia and South Africa were less than 1958.

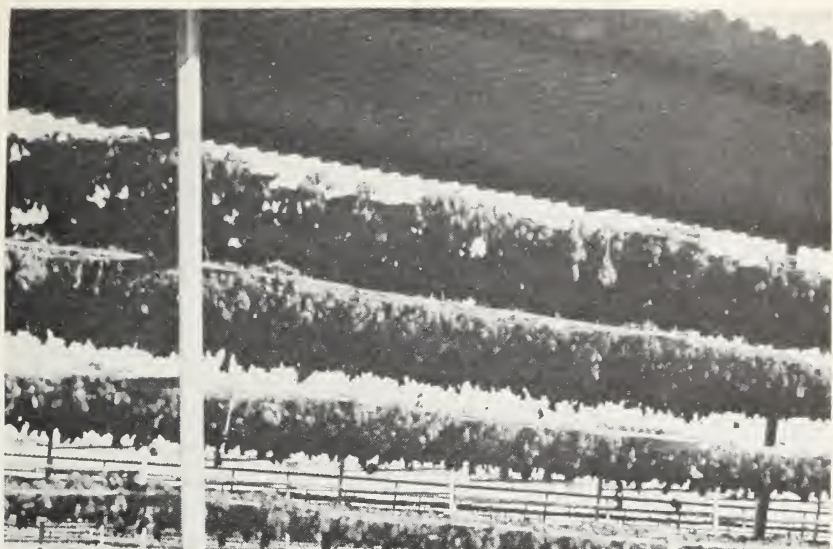
Although the United States supplies most of Canada's canned fruit imports, Australian exports of canned apricots and pineapple to that market have increased significantly since 1957. In fact, over 70 percent of Australia's exports to Canada consist of pineapple. Australian canned peaches and pineapple enjoy duty preferences of 1.5 cents and 1 cent per pound, respectively, as compared to a rate of 2 cents per pound charged on both fruits from the United States.

DRIED FRUITS.—Australia is the third largest producer of dried fruits, particularly such vine fruits as grapes and currants. Dried apricots, peaches, and prunes, produced on a much smaller scale, are consumed chiefly in Australia.

The bulk of Australia's dried grapes are of the sultana variety which closely resembles California Thompson Seedless raisins. Other production consists of lexias, a large grape somewhat lighter in color than the California Tokay, as well as other muscat types. Most of the grape production and processing is centered in two irrigated areas bordering the Murray River—the Mildura area of northwestern Victoria and the Renmark district of southeastern South Australia. Although the area's topography and arid appearance resemble sections of California, these regions are very susceptible to temperature changes and more frequent rainfall. As a result, the drying of raisins and currants in Australia is a very uncertain agricultural pursuit.

In addition to the vagaries of the weather, other factors make Australia's dried fruit industry a high-cost operation: the necessary investment in drying equipment and adequate labor, the high cost of water for irrigation, and the long processing period required to prepare the product for market. Indeed, with the greater internal and ocean freight charges Australia pays, as compared with other producers, to market fruits abroad, it is questionable how well Australia could compete in world markets without the preferential tariff concessions it receives from Commonwealth countries which comprise the bulk of its foreign outlets.

With the entire industry operating in a highly competitive field, marketing of Australia's dried fruit is closely organized. The Australian Dried Fruits Association regulates prices and quantities of dried fruit which can be marketed domestically; the Commonwealth Dried Fruits Control Board regulates exports. Programs to promote export trade have been emphasized in recent years, and increased attention is now being given to production costs, freight rates, and other factors affecting competition in the major dried fruit outlets around the world.



BN-14028

Rack drying of grapes in Mildura area.

Most of Australia's raisins, chiefly sultanas, are exported in bulk in 28- or 45-pound wooden boxes. Experiments were made in 1959 in packing some of the produce in heavy cardboard cartons for both domestic and oversea shipments. Packaging raisins in small containers for the domestic retail market was also introduced in that year.

Most of Australia's raisin exports are consigned to the United Kingdom, Canada, and New Zealand, where Australia enjoys tariff preferences. Exports to these countries and less important Commonwealth areas are above prewar levels. Exports to Japan and other non-Commonwealth areas are irregular, but increasing in importance.

United States and Australian raisins are largely competitive in the U.K. and Canadian markets. Since 1952, Australian raisin shipments to the United Kingdom have averaged about 39,000 tons a year, approximately one-half of total imports, or about the same as prewar (table 22). In contrast, the U.S. share of this market has declined to an average of 18,000 tons, or about one-fifth of the market, as compared to about one-third prewar. Again, Australia has the advantage of duty-free entry, while U.S. raisins are subject to an import tariff of \$1.19 per 112-pound hundredweight, or slightly more than 1 cent per pound.

In the 6-year period 1952-57 Canada's imports of U.S. raisins averaged about 10,500 tons, as compared with 13,000 tons from Australia. Due to short crops in 1957 and 1958, the U.S. position has since deteriorated, with shipments in the period 1958-60 averaging about 8,000 tons as against 16,000 tons from Australia. The Australian product enters the Canadian market free of duty, while a 3-cent per pound duty is applied to U.S. raisins.

TABLE 22.—*Raisins: ¹ Exports by country of destination, averages 1936–38 and 1952–56, annual 1957–59 ²*

Country	Average		1957	1958	1959
	1936–38	1952–56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	30, 935	38, 109	35, 754	39, 527	27, 558
Canada.....	15, 695	13, 836	14, 291	18, 944	14, 976
New Zealand.....	4, 309	4, 851	4, 530	5, 833	5, 006
West Germany.....		³ 268	2, 052	5, 089	199
Ireland, Republic of.....		38		1, 269	784
Japan.....			495	1, 471	916
Netherlands.....		125		685	
Australian Territories.....				681	
Ceylon.....	282	492	501	596	470
West Indies Federation.....	(⁴)	(⁴)	421	627	645
Other countries.....	268	687	530	1, 712	556
Total.....	51, 489	58, 406	58, 574	76, 434	51, 110

¹ Sultanas, lexias, and others.

² Year beginning July 1.

³ Included East Germany prior to 1954–55.

⁴ Not separately shown.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936–37 to 1938–39.* Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952–53 to 1959–60.* Buls. 51–57. Canberra.

Prunes are produced chiefly for home consumption, with some exports going to New Zealand, the United Kingdom, and the West Indies Federation. All these exports are competitive with the U.S. product. Australian exports now consist principally of canned *moist pack* prunes which are somewhat different than U.S.-packaged dried prunes.

Dairy Products

Australia ranks as the eighth largest free world producer of milk, with a highly organized industry for marketing dairy products. Whole milk production tends to fluctuate in some periods because of dry weather conditions; in 1960–61 it was estimated at 1,350 million gallons.

Improved farming practices in dairying have been promoted since 1948 through a Commonwealth Dairy Industry extension grant. This annual grant of £A250,000 (\$560,000), inaugurated for a 5-year period in July 1948 and extended in 1953, is now effective through June 1963.

At the request of the Australian Dairy Industry Council, legislation was enacted in 1958 to provide funds for sales promotion campaigns for domestic sales of butter and cheese, as well as for dairy industry research. These funds are raised by a levy on all butter and cheese. A matching contribution by the Commonwealth Government helps to finance all research projects undertaken by the industry.

At the present time, Australian dairy products are not important competitors with U.S. exports abroad except in some small shipments of dried skim milk to such Far Eastern countries as India, Japan, and Indonesia, and to certain areas of the British West Indies (table 23).

TABLE 23.—*Nonfat dried milk: Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59*¹

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	152	9,592	3,950	23,799	19,379
India.....	102	7,326	3,493	140	674
Netherlands.....			2,952		2,188
Japan.....		160	756	129	
Ceylon.....		655	824	767	793
Indonesia.....		94	467		227
Rhodesia and Nyasaland, Fed. of.....		73	347	172	607
Malaya, Federation of.....		231	151	124	424
West Indies Federation.....		67	261	274	381
Denmark.....		455	281		580
Singapore.....		164	172	101	171
Other countries.....	24	1,401	1,243	534	3,023
Total.....	278	20,218	14,897	26,040	28,447

¹ Year beginning July 1.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936-37 to 1938-39*. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952-53 to 1959-60*. Buls. 51-57. Canberra.

Eggs

Export trade in eggs has declined in recent years due to a decrease in oversea demand and prices. In World War II the United Kingdom became one of Australia's principal outlets for eggs. Since that time, the U.K. market has declined as domestic production has increased, but Australia still ships considerable amounts of both shell and pulp eggs to this market. The Australian Egg Board purchases eggs and egg pulp declared surplus by the State egg boards—except in New South Wales—and arranges for oversea shipment. The New South Wales Board exports eggs and egg products directly.

Since the decline of the U.K. market, the Australian board has been active in seeking alternative markets, and in 1957-58 West Germany became the most important outlet for shell eggs. Other markets have been developed in Italy, Switzerland, Austria, and the British West Indies. There is also some indication of market exploration in other Latin American areas, although to date no significant exports to these markets have been noted.

The Egg Board, in conjunction with the Government's Commonwealth Scientific and Industrial Research Organization (CSIRO), is conducting research in improvement of flocks and better quality eggs for all marketing purposes.

Australian exports of eggs and egg products are at present only slightly competitive with exports from the United States, chiefly in West Germany and the British West Indies.

Variety Meats (Offal)

In variety meats, or offal, the United States and Australia compete for markets in Canada, the United Kingdom, and continental Europe, especially with respect to beef, lamb, and pork products. Other markets in which Australia has made notable increases in the last 3 years are Italy, the West Indies Federation, Malaya, and Singapore.

The United Kingdom, Australia's largest outlet for variety meats, has absorbed since 1952 more than 80 percent of all of Australia's exports (table 24). These shipments are not subject to formal trade arrangements between the two countries, but benefit from a long-established trade pattern and duty-free entry. Since import restrictions were liberalized late in 1959, U.S. shipments of variety meats to the U.K. market have risen sharply. During the first 9 months of 1960, imports of beef variety meats from the United States totaled about 16 million pounds, compared to 7 million pounds during the same period of 1959. In 1960, the United States was second supplier of beef variety meats, next to Argentina, while Australia slipped to third place.

The United Kingdom imported about 6 million pounds of U.S. lamb variety meats during the calendar year 1960, as compared with 600,000 pounds in 1959. Except for beef tongues and sweetbreads, U.K. imports of variety meats are duty free.

Increased slaughterings of cattle and calves, sheep and lambs during the past 2 years have created larger surpluses of variety meats, the chief meat category in which United States and Australian exports compete, primarily in the United Kingdom, Belgium-Luxembourg, and Canada. Australian exports of these meats to the United Kingdom, the major market, increased by more than 60 percent in 1958-59, as compared with 1957-58, while shipments also increased to Italy, the West Indies Federation, and Southeast Asia. Comparative figures prewar are not available, since no separate trade statistics were then compiled on exports of variety meats.

Tallow

Australia's tallow production has increased significantly in the past 3 years as a result of increased slaughter and greater exports of boned meat. This recent evolution in Australia's meat processing, due primarily to the need for adjusting the industry to meet North American marketing requirements, has provided a greater accumulation of fat trimmings for tallow production.

TABLE 24.—*Variety meats:*¹ *Exports by country of destination, average 1952-56, annual 1957-59*²

Country ³	Average 1952-56	1957	1958	1959
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom	11,054	12,320	19,906	17,717
Canada	11	65	72	233
Malaya, Federation of	56	199	215	216
Singapore	860	617	740	622
Belgium-Luxembourg	32	186	186	121
Italy	625	314	767	360
Japan	32	94		
West Germany	⁴ 38			
West Indies Federation	7	124	204	131
Philippines	125	235	78	
United States		18	239	718
Other countries	1,340	683	703	542
Total	14,180	14,855	23,110	20,660

¹ Fresh or frozen beef, sheep and pork hearts, livers, kidneys, etc.

² Year beginning July 1.

³ Not separately shown prewar.

⁴ Included East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

Australia's tallow is used chiefly in the soap and candle industries, but the soap industry is encountering increased competition from the growing use of detergents, thus lessening the domestic need for tallow.

No clearly defined distinction is made between the production of edible and inedible tallow. Federal inspection of edibility is made only on exports. To a lesser extent, pure food regulations of the individual states govern the degree of refinement and quality of tallow for human consumption in Australia.

About 40 percent of Australia's tallow output is surplus and exported. Total exports have averaged only about 10 percent of U.S. exports in the past 2 to 3 years. Considerable increase is noted, however, in Australia's tallow shipments to such markets as Thailand, Japan, the Republic of South Africa, and the West Indies Federation. Shipments to these latter three countries and to the Federation of Rhodesia and Nyasaland have steadily increased over prewar levels (table 25).

U.S. tallow is particularly competitive with the Australian product in the Republic of South Africa, the West Indies Federation, and the Federation of Rhodesia and Nyasaland. Australia's exports to South Africa have increased since 1957 from 12,000 to 16,000 tons while U.S. exports during the same period have dropped from 27,000 to 16,000 tons.

TABLE 25.—*Tallow: Exports by country of destination, averages 1936–38 and 1952–56, annual 1957–59*¹

Country	Average		1957	1958	1959
	1936–38 ²	1952–56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	10,314	8,767	7,151	9,564	11,501
Canada.....	3,331				
India.....	4,953	3,700	1,471	1,796	4,019
Italy.....	391	916			
China ³	1,612		650	⁴ 424	7,666
Japan.....	1,217	3,621	13,263	17,801	15,597
Belgium.....	941	233	84	⁵ 174	
West Germany.....	⁶ 1,388	⁶ 122			566
Netherlands.....	2,457	1,064	28	202	
Singapore.....	(⁷)	955	924	456	960
United States.....	2,892			48	
South Africa, Republic of.....	149	1,706	12,432	12,559	15,980
Rhodesia and Nyasaland, Federation of.....		728	2,363	2,089	2,511
Malaya, Federation of.....	47	3,270	3,786	2,742	8,460
Pakistan.....	(⁸)	1,347	3,870	1,653	6,337
Burma.....	54	4,965	3,728	2,975	4,521
West Indies Federation.....	167	1,045	623	1,285	617
Thailand.....	165	748	1,551	2,470	2,428
Other countries.....	2,642	8,063	3,799	5,149	11,381
Total.....	32,720	41,250	55,723	61,387	92,544

¹ Year beginning July 1.

² Inedible only.

³ Mainland and Formosa.

⁴ Formosa only.

⁵ Includes Luxembourg.

⁶ Included East Germany prior to 1954–55.

⁷ Included in Malaya.

⁸ Included in India.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936–37 to 1938–39.* Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952–53 to 1959–60.* Buls. 51–57. Canberra.

Although Australia's exports to Japan seem to fluctuate from year to year, they have increased from 3 percent of Japan's total trade in 1953–56 to an average of 7 percent in the last 4 years. Some of this increase is attributed to a more liberal Japanese trade policy toward Australia under the bilateral trade agreement effected in 1957.

From 1956 to 1958, Australia's share of the tallow market in the Republic of South Africa increased steadily, from 5 percent to 26 percent, while the U.S. share decreased from 77 percent to 34 percent.

The United States has fared even worse in competition with Australian and New Zealand tallow shipments to the Federation of Rhodesia and Nyasaland. In 1954, it furnished over 90 percent of all tallow imports, about 4,800 tons. By 1957, imports totaled 8,400 tons, with Australia furnishing 76

percent. By 1958, imports from the United States were nonexistent; Australia and New Zealand split the market equally with 8,700 tons total. In 1959, Australia was again the major supplier, with approximately 60 percent of the market.

Much of this shift to Australian tallow in these African markets has been due largely to more favorable prices, successful trade promotion activities, and the fact that Australia delivers tallow in drums, while the United States makes most deliveries in bulk, charging extra for deliveries made in containers. It is doubtful if the small tariff preference extended to Australian tallow by the Federation of Rhodesia and Nyasaland has much effect on imports of U.S. tallow, except when prices are extremely competitive.

Hides and Skins

Almost all of Australia's sheepskins and about one-third of its cattle and calf hides are exported. Its cattle hides and kipskins compete with the U.S. product both in the United States and in the larger foreign markets; namely, the Netherlands, France, Belgium, West Germany, the United Kingdom, and Japan. Both countries find a smaller market for sheep and lamb skins in the United Kingdom.

With the higher prices and foreign demand for hides in 1958-59 and 1959-60, increased amounts of hides and skins of all kinds and grades were exported. Total exports of Australian hides and skins to all destinations reached a postwar high of 231 million pounds in 1958-59, and continued at the same level for 1959-60 (table 26). Australia was able to take advantage of this profitable trade because of increased slaughtering of cattle and sheep since 1958.

Prewar, Australia's main outlets for hides and skins were France and the United Kingdom. Postwar, France continued to be Australia's largest market for sheep and lamb skins, while Japan in recent years has become the largest outlet for cattle hides. Japanese imports of Australian hides and skins in 1959 were almost double those of 1958; they were 3½ times greater than 1956 shipments which preceded negotiation of the Australian-Japanese agreement of 1957. Under this agreement, Australian hides and skins were placed on the automatic approval list as of July 1957.

The United States still remains the largest supplier of cattle hides to the Japanese market, but its share declined from about 70 percent to 45 percent of total imports in the 5-year period 1955-59. Japan eliminated discrimination in imports of hides and skins from all sources as of July 1, 1960.

A net importer of hides and skins prior to 1952, the United States has since shifted to leather substitutes for many commodities, and in some years has become a surplus producer and net exporter of cattle hides and calf and kip skins. U.S. imports of Australian hides and skins fluctuate from year to year according to domestic supply. In 1958-59, U.S. imports of Australian cattle, as well as calf, kip, sheep, and lamb skins, totaled 14 million

TABLE 26.—*Hides and skins:* ¹ *Exports by country of destination, averages 1936–38 and 1952–56, annual 1957–59* ²

Country	Average		1957	1958	1959
	1936–38	1952–56			
	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>
United Kingdom.....	28,420	18,971	18,173	18,240	17,857
Netherlands.....	1,192	3,756	7,272	10,766	6,461
West Germany.....	³ 5,661	³ 4,338	12,025	14,574	9,554
Belgium and Luxembourg.....	2,833	2,400	2,245	1,437	6,083
Japan.....	5,835	5,071	9,170	38,647	27,301
United States.....	9,285	3,795	1,402	14,408	4,676
Sweden.....	1,023	2,916	3,235	5,285	4,437
France.....	62,902	79,020	99,907	105,162	128,596
Poland.....	297	30	350	.....	430
China.....	41	⁴ 251	⁴ 477	⁴ 105	217
Finland.....	1,803	1,200	1,091	2,329	1,605
Portugal.....	.....	112	259	772	309
Italy.....	502	9,203	15,068	11,375	19,249
Other countries.....	5,004	4,408	6,244	7,909	4,330
Total.....	124,798	135,471	176,918	231,009	231,105

¹ Cattle, calf, sheep, lamb and other raw hides and skins (other than fur).

² Year beginning July 1.

³ Included East Germany prior to 1954–55.

⁴ Formosa only.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936–37 to 1938–39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952–53 to 1959–60. Buls. 51–57. Canberra.

pounds—far in excess of imports in earlier years. After a decline in the mid-1950's, this trade increased during the 3 years 1957–59.

In the U.S. Market

Australia supplies the U.S. market with both complementary and supplementary products, chiefly of livestock origin. At present, the main imports are wool and meats.

Wool

Australia is the world's largest producer of merino-type wool and accounts for the major production of apparel wool. Of the estimated total world production of 5,625 million pounds (greasy basis) in 1960–61, Australia produced about 1,650 million pounds, or approximately 29 percent. Almost 95 percent of Australia's total wool output is exported.

The United States is currently dependent upon imports for about 40 percent of its apparel wool; some three-fifths of these imports come from

Australia. Imports of apparel wool by the United States in recent years have declined steadily. This decline is attributed not only to small increases in domestic production but also to increased competition from manmade fibers and larger imports of wool manufactures. The substitution of certain synthetics for woollen fabrics has lessened the requirements for apparel wool imports into the United States.

From a competitive standpoint, U.S. imports of Australian wool supplement domestic production, particularly in the finer types. U.S. shorn wool production has increased over 13 percent since the National Wool Act went into effect in 1955. Production for 1960 amounted to 267 million pounds (greasy basis), but was still below the 300 million pound goal provided by the Act's incentive payment program. However, U.S. mill consumption of apparel wool has tended to decline since 1953, totaling 244 million pounds scoured basis 1960, or about 7 percent below the 261 million pounds utilized in 1959. As a result, U.S. imports of Australian wools have declined as shown in table 27.

TABLE 27.—*U.S. imports of Australian wool: Calendar years 1954-1960 (greasy basis)*

Year	Quantity	Value
	<i>Million pounds</i>	<i>Million dollars</i>
1954.....	65	60
1955.....	79	64
1956.....	60	45
1957.....	51	44
1958.....	37	26
1959.....	49	29
1960.....	37	24

U.S. Census Bureau statistics.

World consumption of raw wool has increased significantly since 1958, with a corresponding increase in the manufacture of wool wearing apparel in many free world countries. Major exporters of these woollen products, namely Italy, the United Kingdom, and France, are finding an increased market in the United States. As these countries are important importers of Australian wool, considerably more Australian wool ultimately enters the U.S. market than is revealed in U.S. raw wool trade statistics.

In recent months, Australia's woolgrower organizations, concerned about the wide fluctuations in wool prices from season to season and competition from synthetic fibers, have petitioned the Commonwealth Government to make an investigation of the industry. A number of price stabilization schemes have been proposed, but no official action is expected until the survey is complete and recommendations are made both to the Government and to producer groups.



BN-14029

Feed lots, slaughtering and meatpacking plant in Queensland.

Meat

Although Australian variety meats compete with U.S. exports to Canada and some European countries, increased quantities of Australia's frozen meats, including variety types, have supplemented U.S. production in recent years. With the decline in cattle slaughterings in the United States, modest imports of Australian manufacturing-type beef and mutton were admitted in 1958. These shipments increased sharply in 1959 to 264 million pounds valued at about \$91 million, Australia's largest export item to the United States. Supplementing domestic production, these imports comprised about 40 percent of total fresh and frozen meat imports, and were largely boneless beef and mutton used in the manufacture of frankfurters, bologna, and other processed meat products. Imports from Australia continued in 1960 at a much lower level, partly as the result of increased domestic production and less favorable prices for beef in the U.S. market. For the calendar year 1960, shipments totaled 183 million pounds, or more than one-third of all U.S. fresh meat imports.

Another development in Australia's trade with the United States in 1959 and 1960 was the shipment of four shiploads of live lambs to the United States for fattening and slaughtering. Combined with imports of Australian meat, these shipments were still only a small proportion of the United States total meat supply. This trade in live lambs declined in 1960, and it is unlikely that it will be revived to any extent.

The production of beef, veal, mutton, and lamb in Australia made great gains in the 1950's as compared to prewar years. Increased output has

been encouraged by relatively high prices in the U.S. and U.K. markets as well as by the 15-year meat agreement negotiated with the United Kingdom in 1952.

This agreement provided for deficiency payments by the U.K. Government to Australian beef and lamb producers should prices for Australian meat fall below fixed levels on the British market. Under the agreement, U.K. payments on beef imports from Australia from 1954 to 1958 totaled £A13.2 million (\$29.6 million). These payments ceased as of December 1958 because of the higher prices prevailing for Australian beef in the United Kingdom. The original agreement also provided minimum prices for mutton and lamb and an assured market for all Australia's exportable meat surplus. Only small quotas of Australia's meat were permitted to be exported outside the agreement. But when the agreement was reviewed in 1958, Australia was granted permission to export unlimited amounts of quality mutton and lamb and lower grade beef to other markets. Most choice grades of beef still go to the United Kingdom under the agreement, but after 1961 there were no restrictions on exports of beef to any destination.

Although mutton and lamb production has shown steady growth since prewar, the main trade emphasis has been placed on exports of beef (table 28). Total beef and veal exports of 255,000 tons in 1958-59 were about 77

TABLE 28.—*Mutton and lamb: ¹ Exports by country of destination, averages 1936-38 and 1952-56, annual 1957-59 ²*

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	97,026	48,496	39,971	52,685	31,649
Canada.....	102	1,389	2,044	4,667	4,588
Arabian States.....		430	328	414	386
Malaya, Federation of.....	802	208	640	855	660
France.....		59	35	109	.....
Singapore.....	(³)	1,882	1,570	1,431	1,892
West Germany.....		⁴ 93	211	199	332
United States.....	13	1,008	4,741	18,735	18,607
Belgium-Luxembourg.....		559	551	457	346
Denmark.....			104	74	.....
Netherlands.....		535	75	147	.....
Other countries.....	1,515	4,128	3,042	3,147	7,053
Total.....	99,458	58,787	53,312	82,920	65,513

¹ Fresh, chilled, or frozen.

² Year beginning July 1.

³ Included with Malaya.

⁴ Included East Germany prior to 1954-55.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue*, 1936-37 to 1938-39. Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade*, 1952-53 to 1959-60. Buls. 51-57. Canberra.

percent above average shipments during the 5-year period 1952-53 to 1956-57 (table 29). Since Australia's release from the export limitations provided in the original U.K. agreement, the total value of all meat shipments has ranked second to wool as Australia's chief export revenue earner. Exports for 1960-61 declined, due to the attractive prices and demand created for meat on the domestic markets and to the fact that fewer cattle are being marketed because of building up of herds.

TABLE 29.—*Beef and veal:*¹ *Exports by country of destination, average 1936-38 and 1952-56, annual 1957-59*²

Country	Average		1957	1958	1959
	1936-38	1952-56			
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	122,389	114,924	108,192	171,280	90,021
Netherlands.....		383	251	491	78
Canada.....		40	295	2,336	1,172
Hong Kong.....	643	3,090	2,732	1,500	1,020
Malaya, Federation of.....	1,391	348	1,831	1,261	1,642
Singapore.....	(³)	4,837	3,945	3,922	2,928
West Indies Federation.....		730	1,508	2,788	1,865
Belgium-Luxembourg.....	⁴ 172	2,069	3,339	2,045	2,671
Japan.....	1,273	2,526	3,259	1,350	2,178
Philippines.....	828	2,468	2,685	1,761	1,195
United States.....	13	869	5,546	57,801	98,587
Other countries.....	6,560	12,006	7,419	8,626	5,968
Total.....	133,269	144,290	141,002	255,161	209,325

¹ Fresh, chilled, or frozen.

² Year beginning July 1.

³ Included with Malaya.

⁴ Belgium only.

Commonwealth Bureau of Census and Statistics. *Oversea Trade and Customs and Excise Revenue, 1936-37 to 1938-39.* Buls. 35 and 36. Canberra.

Commonwealth Bureau of Census and Statistics. *Oversea Trade, 1952-53 to 1959-60.* Buls. 51-57. Canberra.

Increased promotion of cattle and beef production has been noted, particularly in the Northern Territory. Effective disease control schemes, and increased water and transport facilities, introduced even as late as 1956, played no small part in this area's ability to move 164,000 head of feeder cattle to other parts of Australia for fattening and marketing in 1958-59, as compared to the previous high of 146,000 head moved in 1950-51. Improved roadbeds and larger trucks and trailers for transporting live cattle to railheads have provided easier movement of feeder cattle to South Australia, particularly from the Alice Springs area.

The livestock industry in northern Western Australia was aided in 1958 by a Commonwealth grant of £A2.5 million (\$5.6 million) for extension of port facilities near Derby and Wyndham, and expansion of the meat-processing works of Air Beef Limited in the West Kimberleys.

VI. OUTLOOK

Expansion of Agricultural Production

It is difficult to forecast with any degree of certainty the direction of agricultural expansion in Australia in the years ahead. Some indications of new development in certain areas, however, may be indicative of long-term future trends, although agricultural authorities are not all in agreement. After all, the area is vast, the population small, and present transportation and communication facilities are limited.

In an effort to achieve greater agricultural output in all states, Australia has already made sizable investments, which will continue, to improve technology in the development of better varieties of grasses, legumes, and grains, in soil experimentation, and in the search for alternative water sources.

Certainly, future settlement of many undeveloped areas is contingent upon finding adequate sources of water to bring large areas of arid land into livestock and crop production. With inadequate and unreliable rainfall in much of the country's potential agricultural area, considerable priority emphasis is now placed on such sections as the sand plains of Western Australia, the brigalow or scrub tree country of Queensland, and the Ninety-Mile Desert of Victoria and South Australia, where rainfall is adequate for pastures and some crop cultivation. Most of these areas must be heavily fertilized and seeded. Thus, not only is a significant capital outlay required to bring this land into production, it also takes several years before any appreciable return on the farmer's investment can be expected.

Totaling all present and planned projects, either in the process of construction or only recently completed, it is estimated that water for irrigation cannot be increased more than 5 million acre-feet. Much of this expanded water supply (about 2 million acre-feet) will be diverted from the Snowy Mountain project into the Murrumbidgee and Murray River areas of New South Wales and Victoria. Just what the irrigation cost for this water will be is still an unknown factor. No complete cost analysis has been made of this future potential. With industry also expanding and competing for land in these states, some agriculturalists wonder if the high cost of production of irrigated crops for export might not be prohibitive from the standpoint of foreign market competition.

As originally conceived, the new irrigated areas were to be largely used in increased production of fruit, rice, pastures, and fat lambs. The highly competitive marketing situation for fruits and rice, as compared with that of producers in other parts of the world, has made it questionable whether Australia could compete in these commodities even with its highly developed production. The possibility that cotton might be grown more efficiently than rice in some irrigated areas has led to considerable experimentation now being conducted on cotton as an irrigated crop.

Staff members of the Commonwealth Scientific and Industrial Research Organization (CSIRO) believe the Northern Territory has one of the great potentials for increased agricultural development. It is their theory, after conducting numerous land surveys in the area, that considerable potential for crop expansion exists in the Katherine vicinity. With proper cultural methods and fertilization, a stable dryland type of agriculture could be profitably introduced and an estimated 1.25 million acres productively developed through introduction of peanut, sorghum, and legume crops. This in turn would greatly increase production of quality beef cattle in that area.

The CSIRO also maintains that some 500,000 acres can be irrigated with waters from the Ord, Victoria, and other rivers of the Northern Territory. This area can be intensively farmed by introduction of special agricultural practices to break down the heavy-textured soils through addition of mineral substances. These northern sections, under proper cultural practices, could lend themselves to highly mechanized production. Research in the Kimberley area as well as the Humpty Doo project near Darwin has already shown that the area is suited to commercial rice production.

Some of the agricultural development in Western Australia, South Australia, and the Northern Territory includes large-scale company investment in large tracts of Crown land with the proviso that a certain number of acres must undergo specified improvements within certain time limitations.

Agricultural Trade Situation

Agricultural exports will probably continue to dominate Australia's trade for some time to come. Although manufacturing and industry are expanding and some manufactured items are now exported, these exports are not expected to contribute extensively to foreign exchange earnings in the foreseeable future. So far, Australia's industry has been dependent upon imports of certain types of equipment and raw materials and will no doubt continue to be for some time. To pay for these imports, Australia will probably have to increase its agricultural exports, not only to maintain industrial development but also to insure future high standards of living for a growing population.

It is believed that this country's exports of foodstuffs and raw materials will benefit from future increased demand and growth of markets as economic development raises living standards in large population areas of Africa, Asia, and Latin America. Australian wheat, flour, fruit, and animal products are expected to be particularly competitive with other suppliers in Southeast Asian markets because of Australia's geographical proximity.

There is evidence of greater cooperation between Australia's Government and private industry in future market promotion programs. The Commonwealth Department of Trade's announcements of future trade policy place increased emphasis on coordinated commodity schemes abroad. This means

that agricultural products, because of the prominent place they occupy in Australia's export trade, will be featured heavily in future efforts to expand sales in foreign markets. Increased emphasis is being given to the display of Australian export items at trade fairs and exhibitions in continental European countries. More attention is also expected to be given to consumer quality preferences, packaging specifications, and product brand promotion to meet foreign competition.

Another evidence of Government promotion of exports is the expansion of the Commonwealth Trade Commissioner Service. Since 1958, additional personnel have been assigned to posts in Europe and the United States, and new posts have been opened in Asian and African countries, primarily to sell agricultural raw materials and food products.

Effects on U.S. Farm Products

To what extent agricultural production and trade trends in Australia will continue to influence U.S. farm exports is impossible to forecast with any degree of accuracy. Much depends on the timing of factors affecting Australia's agricultural production and trade potential. Chief among these are the rate of population growth; rate of capital investment in agriculture; future expansion of transportation and communications; increased settlement of developed areas; production potential of undeveloped areas; and the effect this new production will have on farm marketing patterns in Australia.

In Australia

U.S. agricultural exports to Australia could be seriously affected by Australia's current policy of increasing production of tobacco and cotton.

TOBACCO.—In 1960, production of tobacco was three times greater than the average output for 1953–56 (table 11). Should this expansion continue, U.S. exports of tobacco leaf to this market, already declining, may decline still further. Such a decline would, of course, affect U.S. tobacco growers, as Australia is one of the largest export outlets for U.S. leaf.

Tobacco is planned for newly irrigated areas in Queensland. Certain factors, however, may prevent realization of this increased output. Expansion will require more capital investment by producers in machinery and labor which could result in higher costs, particularly in newly developed irrigated areas.

Prices of domestic tobacco are already high. The average price to producers in 1959–60 was \$1.28 per pound, about double that of quality grades of leaf produced by major supplier countries. Moreover, there is a chance that domestic prices will rise to a level where manufacturers may choose to rely on greater imports even at full duty rates.

COTTON.—Like tobacco, cotton is planned for areas of crop expansion, both in irrigated and nonirrigated areas. With increased cotton acreage

requiring more capital investment in labor and mechanization, higher production costs for this crop could result. Even though the present subsidized price policy for cotton does not expire until 1963, producers are already pressing for a higher price guarantee of 15.5d. (14.5 cents) per pound seed cotton through 1967. Should the cotton expansion programs prove successful, a decline in cotton exports from the United States could be expected.

In Other Countries

Australia's agricultural exports will continue to be competitive with U.S. products in many important food and raw material markets of the world. Numerous U.S. products have difficulty competing price-wise in such major markets as the United Kingdom and Canada because of the preferential duties extended to Commonwealth products.

WHEAT AND FLOUR.—From a long-term standpoint, it is very difficult to predict to what degree the United States may encounter greater competition from Australian wheat and flour exports. At present, Australia is concerned only with exports of soft wheat. The 1960-61 crop was a record one and the prospects for 1961-62 are equally good. So far, Australia has been fortunate in finding export outlets for much of her surplus grain, but it is difficult to forecast how long this situation will exist.

Research programs are now in progress to improve wheat varieties and promote production of hard wheats. With this new research and with trade promotion policies already advanced by the Australian Wheat Board, it is reasonable to expect increased competition from Australia in a wider range of wheats and flours, and probably in a wider range of markets such as the Middle East, Far East, Latin America, and Africa.

BARLEY.—As already noted, U.S. barley in recent years has encountered considerable competition from Australia's exports to West European areas and to Japan. However, as the result of large Japanese stock accumulations, a high support price for domestic production, and a considerable shift away from barley as a food grain to other cereals, no imports were made in 1960. At this time, there appears to be little likelihood that either Australia or the United States will resume any sizable barley trade with Japan.

Other foreign markets in which Australia is now competitive with U.S. grain are the United Kingdom and the Common Market areas of West Germany, the Netherlands, and Belgium-Luxembourg. U.S. barley must be priced to compete with the Australian product, which enjoys a tariff preference in the United Kingdom market. In Common Market areas, the extent to which United States and Australian barley will continue to compete is uncertain. Both suppliers may face increased competition from France, a surplus barley producer and Common Market country, which may receive special production incentives from certain long-term provisions of the Common Market treaty. Australian exports to West Germany are expected to be maintained under bilateral arrangements.

OATS.—As one of the *Big Four* oats suppliers, Australia has furnished in recent years an increasing share of the total world market. United States and Australian oats are competitive in the United Kingdom, West Germany, and the Netherlands. Australia's shipment of oats to West Germany, one of its major outlets, is guaranteed by the Australian-German bilateral agreement. Over the long term, it is believed Australia's future oats exports to Common Market nations will depend on policies adopted by member countries as to development of domestic production and the degree to which imports of feed grains may be permitted to supplement domestic production.

CANNED FRUIT.—Seventy-five percent of the Australian canned fruit pack is comprised of deciduous tree fruits, the remainder consisting of canned pineapple and tropical salad packs. Total production of canned deciduous fruit rose sharply in 1954 as postwar plantings came into full bearing, but output of peaches and apricots was somewhat curtailed as the result of the floods in 1956. Replantings have been made over wide areas, but it is doubtful that much of the new orchard will be bearing before the 1963 harvest. The New South Wales Department of Agriculture indicates that Australia's production of peaches by 1963 will increase 40 percent over present levels, or to about 4.2 million bushels.

As already indicated, the U.S.'s greatest competition with Australian canned fruits is in the United Kingdom and Canadian markets. Regardless of the increase in U.S. exports of canned fruits to the United Kingdom in 1959, it is unlikely that U.S. exporters in future years will be able to displace Australia and the Republic of South Africa as major suppliers of canned fruits to the United Kingdom, mostly because of the preferential duties extended to these producers and the keen price competition in this market. If the United Kingdom completely liberalized licensing of canned fruits, the United States might have a better chance to compete with both Australia and the Republic of South Africa.

In 1960, Australia made a greater effort to meet Canadian Government size and content specifications on imported canned fruit. This may create more future competition for U.S. products, even though the United States has a freight advantage over Australia.

DRIED FRUIT.—Australia's future competition with U.S. raisins in foreign markets will depend largely on its success in maintaining efficient production and controlling costs, especially in newly developed areas under irrigation. Only in this way can Australia continue to offset higher freight rates on exports to the United Kingdom and Canada, as compared to freight costs incurred by U.S. exporters.

TALLOW.—In the future, competition between United States and Australian tallow exports may be keener if Australia succeeds in accomplishing two long-range objectives: First, expansion of livestock and meat production programs; and, second, improvement of quality while at the same time controlling costs by wider adoption of bulk handling methods, particularly in servicing larger market outlets.

HIDES AND SKINS.—How competitive future trade between Australia and the United States will be in hides and skins depends on price, meat requirements, and livestock slaughterings in both countries. Barring droughts, both countries plan to build up livestock numbers, which should result in reduced slaughtering and fewer hides and skins. But if U.S. meat production increases substantially and marketing prospects improve for Australian meat exports, it is possible that these countries could become even more competitive, particularly if world markets for hides and skins should contract with greater use of leather substitutes.

MEAT.—After a 3-year decline, U.S. slaughterings of cattle are now increasing, and this upward trend will probably continue. Slaughter of cows and lower grade cattle is expected to increase more than that of fat cattle. As a result, prices for cheaper imported meats will probably decline in relation to prices of U.S. meats. The extent to which increased U.S. production can satisfy domestic meat requirements is not yet known, but with lowered prices for imports of fresh and frozen meats, the U.S. market is becoming less attractive than during the peak import years of 1958–60.

There is also the question of Australia's meat supply situation during the next few years. Since 1958–59 a general downward trend in beef cattle slaughterings has been indicated, which seems to be in line with this country's policy of building up herds, particularly in some of the larger cattle areas. With higher prices locally and in the United Kingdom, together with increased domestic demands for beef, it is possible that meat available for shipment to markets outside the United Kingdom may be decreased for the next few seasons.

Australia's future meat exports to the United States will depend on the ability of its livestock industry to supply the requirements of a growing domestic population, as well as to provide meat surpluses of the quality and types needed by the United States.

VARIETY MEATS (OFFAL).—Should future livestock and meat expansion plans be realized, Australia may try to promote meat sales in Southeast Asia. Because of Australia's geographic location and freight advantage, its variety meats may become increasingly competitive in price with U.S. products in these countries.

In European markets, competition between Australia and the United States will probably continue, mostly in the United Kingdom. The future of this competitive trade will depend upon U.K. policy in regard to domestic meat production, as well as to the extent of competition by other suppliers, such as Argentina and New Zealand.

In the United States

WOOL.—Under the U.S. Wool Act, incentive payments are made to wool producers in an effort to increase domestic production, but as yet production has not attained the 300-million-pound goal set by the act. With the growth of synthetics and the price differentials between wools and certain synthetic

fabrics, it is doubtful that U.S. consumption requirements for apparel wool will increase to any appreciable extent during the next few years. They might increase, however, if new advances in research, such as washability and mothproofing, permit wool to recapture some of the marketing advantages lost to synthetics.

Both United States and Australian wool interests, Government and private, are engaged in a cooperative survey of future consumption prospects in the U.S. and other free world markets, with considerable emphasis on the future of wool in relation to synthetics in textile manufacturing. Findings of this study should give some idea as to future prospects for Australian wool in the U.S. textile industry. A recent industry study made in Australia indicates that if breeding of sheep for meat purposes continues to be emphasized. Australia's production of merino and finer wools will tend to decline in future years, and that of coarser wools to increase.⁵ This, in turn, may heighten competition with the coarser wools produced in New Zealand and Latin America.

⁵ Lempriere (Aust.) Wool Futures Pty. Ltd. *Wool's Role in the Sixties*. Melbourne. Dec. 1960.

APPENDIX

TABLE 30.—Production and area, selected agricultural commodities: Averages 1936-38 and 1917-56, annual 1958 and 1959¹

Commodity	Unit	Production			Area		
		Average		1958	Average		1959
		1936-38	1917-56		1936-38	1917-56	
Grains:							
Wheat.....	Mtl. bu.	165	186	215	1,000 acres	1,000 acres	1,000 acres
Barley ²	Mtl. bu.	10	29	66	13,466	11,012	10,400
Oats ²	Mtl. bu.	16	35	109	1,391	2,489	2,400
Rice ²	Mtl. bu.	2	4	7	1,572	2,313	3,000
Fruits:					21	37	51
Apples.....	Mtl. bu.	11	11	13	381	369	366
Citrus.....	Mtl. bu.	5	7	7	341	345	346
Peaches.....	Mtl. bu.	2	3	3	318	320	315
Pears.....	Mtl. bu.	2	4	5	318	319	318
Pineapples.....	Mtl. bu.	1	3	5	35	37	39
Apricots.....	Mtl. bu.	1	1	1	310	311	39
Dried vine fruits.....	1,000 tons.	91	85	98	3125	3125	3123
Livestock products:							
Beef and veal.....	1,000 tons.	637	744	1,015			
Mutton and lamb.....	1,000 tons.	357	384	551			
Pork.....	1,000 tons.	105	100	114			
Butter.....	1,000 tons.	214	193	217			
Cheese.....	1,000 tons.	28	49	49			
Milk, condensed ⁴	1,000 tons.	20	71	74			
Milk, dried ⁵	1,000 tons.	13	56	82			
Wool ⁶	Mtl. lbs.	997	1,219	1,591			
Sugar ⁷	1,000 tons.	901	1,127	1,582	8,258	8,348	8,314
Tobacco, dried leaf.....	Mtl. lbs.	5	6	14	10	8	15
Peanuts, unshelled.....	Mtl. lbs.	16	23	71	18	26	60
Cotton, unginued.....	Mtl. lbs.	15	3	4	60	7	20

¹ Year beginning July 1. ² Winchester bushels. ³ Bearing acreage. ⁴ Includes concentrated milk (approximately 25 percent). ⁵ Some condensed milk reported with dried milk. ⁶ Full cream and skim milk, infants' and invalids' foods, malted milk, milk sugar, powdered buttermilk, and whey. ⁷ Greasy basis. ⁸ Average of cane for crushing.

Commonwealth Bureau of Census and Statistics. *Primary Industries, Part I—Rural Industries, 1958-59*. Bul. 53. Canberra. July 1960. Commonwealth of Australia Bureau of Agricultural Economics. *Quarterly Review of Agricultural Economics*. Vol. XIV, No. 2. Canberra. April 1961. Commonwealth of Australia Bureau of Agricultural Economics. *Trends in Australian Rural Production and Exports*. No. 18. Canberra. June 1961.

TABLE 31.—*Wheat and wheat flour: Exports by country of destination, averages 1936–38 and 1952–56, annual 1957–59*¹

Country	Average		1957	1958	1959
	1936–38	1952–56			
Wheat:	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
United Kingdom.....	1,380,011	598,619	293,758	636,777	629,559
Japan.....	57,838	116,778	202,849	227,036	417,281
India.....	76,564	384,391	13,033	39,508	351,180
New Zealand.....	72,774	249,183	290,407	246,869	237,105
West Germany.....	² 11,733	² 155,799	.....	52,625	126,915
Pakistan.....	.....	66,293	141,599	21,605	116,256
Rhodesia and Nyasaland, Federation of.....	³ 38	60,640	85,761	62,307	99,413
Hong Kong.....	1,965	19,960	51,424	65,519	71,648
Malta.....	12,948	9,339	22,271	.....	25,592
Ireland, Republic of.....	90,140	36,278	19,421	107,698	25,463
Malaya, Federation of.....	60	13,186	19,372	20,139	21,589
Italy.....	140,042	14,551	.....	.....	.....
China (mainland).....	120,371	.....	2,128	9,520	.....
Other.....	329,624	200,065	45,239	149,334	615,560
Total.....	2,294,108	1,925,082	1,187,262	1,638,937	2,737,561
Flour: ⁴					
Ceylon.....	22,529	248,240	71,556	85,128	197,693
Malaya, Federation of.....	92,142	104,464	97,025	128,210	155,946
United Kingdom.....	224,181	120,624	59,939	63,260	64,158
Singapore.....	⁽⁵⁾	86,108	51,668	56,431	50,776
Indonesia.....	117,839	170,300	87,357	52,578	45,729
Arabian States.....	372	19,272	29,322	41,694	45,466
Aden.....	4,247	26,182	30,228	48,426	35,679
Thailand.....	14,576	18,419	23,237	21,599	20,342
Hong Kong.....	60,108	12,644	6,746	6,593	7,767
China (mainland).....	115,988	292	689	.....	.....
India.....	924	27,771	644	122	.....
Other.....	236,131	194,299	180,029	117,067	120,830
Total.....	889,037	1,028,615	638,440	621,108	744,386
Wheat and flour: ⁴					
United Kingdom.....	1,604,192	719,243	353,697	700,037	693,717
Japan.....	⁶ 57,915	⁶ 118,901	202,849	227,036	417,281
India.....	77,488	412,162	13,677	39,630	351,180
New Zealand.....	72,774	249,183	290,407	246,869	237,105
Ceylon.....	22,529	248,240	71,556	85,128	197,693
Malaya, Federation of.....	92,202	117,650	116,397	148,349	177,535
West Germany.....	² 11,846	155,799	.....	52,625	126,915
Pakistan.....	.....	66,293	141,599	21,605	116,256
Rhodesia and Nyasaland, Federation of.....	38	60,640	85,761	62,307	99,413
Hong Kong.....	62,073	32,604	58,170	72,112	79,415
Singapore.....	⁽⁵⁾	86,108	51,668	56,431	50,776
Indonesia.....	117,839	170,300	87,357	52,578	45,729
Arabian States.....	372	19,272	29,322	41,694	45,466
Aden.....	4,247	26,182	30,228	48,426	35,679
Malta.....	12,947	9,339	22,271	.....	25,592
Ireland, Republic of.....	90,140	36,278	19,421	107,698	25,463
Thailand.....	14,576	18,419	23,237	21,599	20,342
Italy.....	140,041	14,551	.....	.....	.....
China (mainland).....	236,359	292	2,817	9,520	.....
Other.....	565,564	392,241	225,269	266,400	736,390
Total.....	3,183,142	2,953,697	1,825,703	2,260,045	3,481,947

¹ Year beginning July 1. ² Included East Germany prior to 1954. ³ Rhodesia only.

⁴ In terms of wheat. ⁵ Included with Malaya. ⁶ Includes small shipments of flour.

Commonwealth Bureau of Census and Statistics. *Overseas Trade and Customs and Excise Revenue*, 1936–37 through 1938–39. Buls. 35–36. Canberra. Commonwealth Bureau of Census and Statistics. *Overseas Trade*, 1952–53 through 1959–60. Buls. 51–57. Canberra.



